Admission to Candidacy (ATC)

June 2012

GUIDELINES

Purpose of the examination

1. To determine whether the student is competent to pursue graduate studies in biology; the examination takes place at the earliest time such an assessment is possible.

- 2. To identify any specific weaknesses in the student's background relevant to the proposed research area.
- 3. To evaluate the student's overall ability and to assess requests for program transfers.
- 4. To assess whether the proposed research is suitable for a graduate thesis.

Nature of the examination

The student is asked to prepare a 5-7 page (single spaced, including reference list, excluding figures, tables and appendices) research proposal. This should provide a suitably documented account of the project that the student wishes to undertake for an MSc or PhD degree. It will be presented to the examiners in sufficient time for them to read it before the examination and to assess its quality. The proposal should be understandable to biologists without direct expertise in the field. Detailed descriptions of research methods and protocols may be given in appendices.

During preparation for the ATC the student should initially consult extensively with the supervisor on the rationale behind the proposed project, important background literature, resources available, practical limitations, and the nature of the ATC examination. The student will independently produce a proposal, and the supervisor is expected to review 1-2 drafts. Before the ATC, consultation by the student with the rest of the supervisory committee will generally be limited to specific factual questions, and the committee members will generally not be expected to review drafts of the proposal. In cases where a committee member possesses expertise in a field which is outside that of the supervisor's, but relevant to the project, more extensive consultation may be appropriate.

The examination committee consists of a chairperson, the supervisory committee, and an "external" examiner, selected by the chairperson of the student's stream. To promote consistency and uniform standards, the stream chair may chair the examination. The student's supervisor does not examine the student, but may participate in the final assessment and is expected to channel helpful information back to the student.

The examination begins with a 15-minute verbal presentation of the proposal by the student, highlighting the goals of the work, the research strategy and the expected contribution to new knowledge. It is unnecessary and indeed undesirable, to give detailed descriptions of research methods and protocols in the verbal presentation. The chairperson and the three examiners then question the student on the proposal and on relevant concepts bearing on the proposal.

The examiners will be aware that the ATC proposal is not a detailed outline of research procedures but may, nevertheless, question the student's general knowledge of methodology required for the project and theory relating to it. At the same time the examiners will keep in mind that the ATC defence is <u>not a comprehensive</u> examination. Questions will arise from the scientific content of the work presented and will not range disconnectedly over the entire field. The student is being examined for competence by evaluating his/her ability to put together a viable research project and to defend both the rationale and the methodology. In the process, the student must demonstrate mastery of the science on which the work is based.

The chairperson is expected to intervene on behalf of the student if examiners' questions are not consistent with the purpose of the ATC defence.

Setting up the examination

When ready, see the Graduate Secretary, Carolyn Young, to set up the examination. She will arrange date and time, a room, find a chair for the examination and for an "external" examiner. The student should provide hard copies of the proposal to all examiners at least one week before the examination, unless an examiner agrees to receiving them in electronic form.

Evaluation

Each examiner will independently complete an evaluation form (ATC Part 2, see later). After the defence, these are collected by the chairperson who enters the results on a consensus form (ATC Part 3, see later). The examiners discuss the evaluation amongst themselves and with the supervisor; the chairperson enters the decision, all useful comments, and an overall evaluation on the consensus form which is then signed by all present, to indicate their concurrence.

Where the candidate is required to repeat the ATC examination, the date for resubmission must be indicated.

Where the candidate is passed conditionally, the conditions must be entered on the consensus form.

A failure is given when the student's performance at the Admission to Candidacy Examination indicates that they are not suitable for graduate studies in Biology. Failure results in academic dismissal (according to FGS regulations). If the student wishes to be readmitted, he/she should apply to the Graduate Coordinator to petition FGS for readmission. If readmitted, the student must repeat and pass the ATC examination within 12 months.

Requests for Program Transfer

All such requests must be considered by the examining committee and a recommendation arrived at. If it is positive, the recommendation will be forwarded to the GPC chairman.

Where transfers to a Ph.D. program are recommended, the examiners must specify the additional classes to be taken and recommend a Preliminary Examination external examiner (external to supervisory committee).

Compliance

It is the responsibility of the graduate coordinator to ensure that all decisions of the ATC examiners are adhered to.

Peripheral Benefits

1. Students can expect to encounter many of the elements of an ATC exam at frequent intervals during their career (job interviews, grant applications, etc.). It is therefore, a useful educational experience.

2. Members of the department learn about the research activities of graduate students and of their colleagues.

3. Biology faculty have an opportunity to meet external supervisors.

4. At the end of the ATC exam the supervisory committee may hold or arrange a meeting with the supervisor and student.

5. The process helps to assure the maintenance of a high standard of supervision.