

# Candidacy Exam Information

This document will assist Doctoral students and their supervisors towards the completion of the candidacy exam. It outlines the following details:

- Purpose of the candidacy exam;
- Objectives;
- Preparation;
- Timelines;
- When to take the candidacy exam;
- Scheduling the exam;
- Composition of candidacy exam committee;
- Responsibilities of supervisor, examiners, and examining chair;
- Exam components;
- Recommended procedure for candidacy exams;
- Outcomes, and
- Report of the candidacy exam.

**Purpose of the candidacy:** The purpose of the candidacy exam is to evaluate and confirm the suitability of the PhD student to undertake advanced research, as required in the PhD program.

**Objectives:** The exam has three components: the candidacy report (research proposal), oral presentation, and oral examination. Although the precise content of the exam is determined by the examining committee, questions should not dwell solely on the proposal itself. Students are normally expected to demonstrate:

- A broad grasp of existing factual and conceptual knowledge central to the discipline within which the research is focused;
- An ability to think creatively and critically about questions related to their area of research;
- An awareness and appreciation of the significance of new discoveries in their area of research;
- A full understanding of key assumptions and technical complexities of relevant research methods (e.g., analytical, experimental, observational, statistical);
- Sound knowledge of the biophysical and/or social characteristics of the organisms or systems on which they work.

**Preparation:** Students should discuss the content of the oral exam with each member of the committee prior to the exam. Some members may choose to indicate specific topics relevant to the student's research program that they plan to cover during the exam.

**Timelines:** A general guideline for students preparing for the candidacy exam is as follows:

- 4-6 weeks prior to the exam: meet with supervisor and examining committee members to discuss oral exam;
- 2-3 weeks prior to the exam: schedule practice sessions with group;
- 2 weeks prior to the exam: submit candidacy exam report and updated CV to committee members and the Graduate Program Administrator at [grad.ales@ualberta.ca](mailto:grad.ales@ualberta.ca);
- 1 week prior to the exam: meet with exam chair to discuss exam format.

**When to take the candidacy exam:** Students must pass an oral candidacy exam to become a formal PhD candidate. It is recommended that the PhD candidacy exam be taken before the end of the second year, when

most, if not all, formal course work is completed, but should be taken no later than the end of the third year of a student's program (per U of A Calendar). FGSR requires that the exam be completed no later than 6 months prior to the final defense, although delaying the examination that long basically defeats its original purpose. At the time of the candidacy the thesis proposal should be well defined.

**Scheduling of exam:** FGSR notes it is the responsibility of the **supervisor** (not the student) to ensure that adequate time is allotted for scheduling examinations. FGSR requires that the department recommend an examining committee four weeks prior to the exam.

**Composition of candidacy exam committee:** The examination is conducted by the **supervisory committee plus two other arm's length examiners** and a chair who is not an examiner.

- **Chair:** Every exam committee must have a chair who is not a supervisor but is a member of the student's home department. The chair should have sufficient experience of graduate examinations to be able to allow the examination to be conducted in a fair manner, and is responsible for moderating the discussion and directing questions. It is the chair's responsibility to ensure that departmental and FGSR regulations relating to the final examination are followed. The chair does not vote.
- **Examiners:** Examiners are full voting members of the exam committee. With the exception of the Dean, FGSR, the Dean of the department's Faculty, or a Pro Dean (Dean's representative), who may participate fully in the examination, *persons other than the examiners may attend only with the prior approval of the Dean, FGSR, the Dean of the department's Faculty, or the chair of the examining committee.* With the possible exception of the Pro Deans, all examiners must be either active in the general subject area of the student's research, or bring relevant expertise to the assessment of the thesis.
- **Arm's length examiners:** Candidacy exam committees require two arm's length examiners. An arm's length examiner must not be (or have been) a member of the supervisory committee, or have been connected with the thesis research in a significant way. The examiner should not have been associated with the student, outside of usual contact in courses or other non-thesis activities within the University, nor be related to the student or supervisor(s).

Except in special circumstances (fully justified in writing to the Dean of the department's Faculty), an arm's length examiner should not be a close collaborator of the supervisor(s) within the last six years.

Arm's length examiners who have served on a student's candidacy exam committee do not lose their arm's length status as a result, and are eligible to serve as arm's length examiners at the student's doctoral final exam if the other conditions of being arm's length remain unchanged.

- **Attendance:** In the absence of unforeseen circumstances, it is essential that all examiners attend the entire exam. Attendance means participation either in person or virtually. If the department has warning that any member of the examining committee cannot attend the examination, the department should contact the Dean, FGSR for advice. The situation will be dealt with on a case-by-case basis, but it may be necessary that the exam be postponed and rescheduled, or the examiner be replaced.

Visitors may not participate in the committee's discussion concerning its decision on the student's performance and must withdraw before such discussion commences.

**Responsibilities of supervisors, examiners, and chair:**

- The supervisor is responsible for selecting members of the exam committee who are knowledgeable in the general research field being undertaken by the student. The supervisor contacts prospective committee members to ensure that they are willing and able to participate. The supervisor works with the student to ensure that they are preparing appropriately for the exam; often this will entail having a practice exam session to give the student a better understanding of what to expect and the degree of detail to provide in the actual exam.

- Examiners are nominated by the AFNS Department for approval by FGSR. Supervisors are responsible for recommending examiners and confirming they can attend the examination at the date and time selected by the supervisor.
- The chair is a faculty member of the AFNS Department who volunteers for the role. Where possible, chairs are chosen from within the student's research interest group. The chair should not have had previous formal advisory contact with the student. The chair has three primary responsibilities:
  - To maintain the interests and high standards of the department;
  - To ensure a fair process for the student; and
  - To ensure that all required courses to date have been completed, and any other outstanding requirements listed in the student's file have been met.

The chair thus serves as a 'referee' who ensures fairness, balance and order during the exam. They moderate the exam and direct the questioning, as well as ensure that departmental and FGSR regulations are followed. The chair does not vote on the outcome of the exam. After the exam, the chair writes a report for the student to summarize the committee's decision. The chair completes the AFNS Candidacy Exam Report form and returns it to the Graduate Program Administrator, and they ensure the FGSR Report of Candidacy Completion is signed by the supervisor and returned to the Graduate Program Administrator.

### **Exam components:**

1. **Candidacy report** – The student will prepare a research proposal using the format of a Tri-Council Research Grant application (see below). This proposal is sent to the exam committee and Graduate Program Administrator **two weeks prior** to the scheduled exam date.

Note that the research proposal itself is not the sole focal point of the oral exam. It is intended as a document from which other questions relevant to the research area(s), as well as more general questions, can be derived such that the objectives of the candidacy exam can be achieved.

Within the research proposal the student will describe:

- The progress of research activities related to the proposal;
- Both short and long term objectives;
- A literature review pertinent to the proposal;
- Research design and methods;
- The anticipated significance of the work;
- The training aspect of the proposal (if appropriate);
- Include a GANTT chart with estimated completion times for each research activity and final exam. (The GANTT chart is not included in the page limit.)

The proposal can be a maximum of 5 pages, single-spaced (maximum 6 lines per inch), with margins no smaller than of  $\frac{3}{4}$  of an inch (1.7 cm) all around. If you use a type size measured in pts, it must be no smaller than 12 pts; if you use a type size measured in cpi, it must be no more than 10 cpi.

2. **Oral Presentation** - At the start of the exam, the student will be given **15 minutes** to introduce themselves and their research program, highlighting the objectives and progress of the PhD research program. The presentation will be uninterrupted and will be limited to a maximum of 20 minutes. This is NOT a research seminar.
3. **Oral Examination** - The committee may conduct some of the questioning based on the content of the proposal and oral presentation. However, the committee must broaden the line of questioning so that the general knowledge of the student in areas related to the research field is thoroughly examined. It is the responsibility of the chair to ensure that this objective is met. As a guideline, **the majority of the**

**examination time should be spent dealing with issues other than the details of the proposal and oral presentation.**

**Recommended procedure for the candidacy exam:**

- Student and exam committee chair: meet 1 week prior to exam to discuss format.

The examination:

- The **student** presents a 15 minute introduction summarizing the research progress.
- *In the absence of the candidate*, the **chair** reviews the student's record with the committee.
- *In the absence of the candidate*, the **chair** calls for questions on the above material (offers to circulate file to examiners).
- *In the presence of the candidate*, the **chair** explains the objectives of the exam to the student.
- *In the presence of the candidate*, the **chair** establishes an order of questioning (and scheduled breaks) prior to the start of the exam and confirms material to be examined. At the discretion of the chair, the arm's length examiners are given the opportunity to begin the questioning.
- The **student** is given the opportunity to ask questions or make requests before the exam begins.
- The oral exam is commenced, with questions from the **examiners**. Normally consists of one or two rounds. During the 1st round examiners are allowed 15-20 minutes each to question the candidate; during the 2nd round examiners are allowed 5-10 minutes each for questioning.
- At the conclusion of the exam, the **student** is given the opportunity to make a closing statement or ask closing questions.
- After the student has left the room, the **examiners** deliberate.
- A final decision is normally arrived at via discussion until a consensus is reached. Statements to be included on the Report of the Candidacy Examination would normally be discussed at this time.
- The student is advised of the final decision.
- The **chair** drafts, signs, and submits the Report of the Candidacy Examination to the Graduate Program Administrator and Associate Chair, Graduate Programs, AFNS. The form is provided to members of the committee at the beginning of the exam.
- The student meets with the **supervisor** to discuss results of candidacy exam.

**Outcomes:** The final decision of the exam committee is recorded on the 'Report of the Candidacy Examination' form. Possible outcomes include:

- **Pass:** The performance was exemplary or acceptable, with no conditions. The student exhibited a strong command of all the areas examined and communicated information clearly. The FGSR Report of Candidacy Completion form is signed by the supervisor and submitted to the Graduate Program Administrator.
- **Conditional Pass:** The performance, while generally satisfactory, was weak in certain areas. The committee will assign specific conditions (e.g., courses, readings, etc.) that the student must satisfy. The committee must also specify a proposed timeline (no more than 6 months from the date of the exam) for satisfying the conditions. Once the conditions are met, the supervisor must inform the Graduate Program Administrator so that the FGSR Report of Candidacy Completion form can be processed. The following information is required with a recommendation for a Conditional Pass:
  - The reason for the recommendation;
  - The details of the conditions;
  - The timeframe for the student to meet the conditions;
  - The approval mechanism for meeting the conditions (e.g. approval of the committee chair or supervisor, or approval of the entire committee, or select members of the committee);
  - The assistance the student can expect to receive from committee members.
- **Fail:** The performance was inadequate and the committee has doubts about the student's potential to improve. One of the following three options must be indicated:

- Repeat candidacy exam;
- Change category to MSc program (thesis- or course-based);
- Terminate the PhD program and withdrawal of the student from the graduate program.

If all but one member of the committee agrees on a favorable decision (pass or conditional pass), the decision is that of the majority. If two or more dissenting votes are recorded, the case is referred to the Dean, FGSR who determines the subsequent course of action.

**Report of the candidacy exam:** In addition to determining the outcome of the exam, the committee should advise the exam chair on appropriate comments to be made in the chair's report and in specific areas listed on the Report of the Candidacy Examination form. The chair will send a copy of the completed form and their report to the student and the supervisor

If the student is not successful in the exam, the exam chair files a written report to the Dean, FGSR through the Graduate Program Administrator, with copies to the student, the examiners, and the supervisor.