

**PURPOSE AND SCOPE OF THE PHD CANDIDACY EXAMINATION:  
DEPARTMENT OF EARTH, OCEAN AND ATMOSPHERIC SCIENCES**

The PhD Candidacy exam is meant to determine the adequacy of a student's academic background, knowledge and readiness to carry out PhD-level research, as evidenced by the ability to:

- 1) Articulate clear and significant research questions, and propose feasible methodological approaches to examine those questions.
- 2) Demonstrate a sound understanding of a relevant scientific context for the research, including both depth and breadth of knowledge as defined by the examination committee prior to the exam.
- 3) Demonstrate critical and independent thinking and the ability to interpret relevant concepts and/or observations.
- 4) Demonstrate an appropriate level of proficiency with key methodological approaches that will be used to conduct the research.

*As the PhD candidacy exam can identify gaps in the student's knowledge that can be remedied, it is expected that the exam be taken within 24 months of entering a PhD program.*

At least 3 months prior to the PhD Candidacy exam, the candidate must produce a well developed draft research proposal that is approved by the full supervisory committee. The draft proposal is not meant to rigidly define the student's PhD research trajectory. Rather, it is meant to demonstrate the candidate's ability to articulate clear research questions, critically review relevant literature and propose a feasible approach (*see point 1 above*). In addition to gauging the student's ability to propose an important and relevant program of research, the draft proposal will also be used, in part, to define the scope of topics that will be covered during the Candidacy Exam. A general list of topics, and specific reading lists from each examiner will be provided in writing to the student at least 3 months prior to the Candidacy Exam. A final version of the proposal will be presented to the examining committee at least 2 weeks prior to the PhD exam. This final version of the proposal must be formally accepted by the supervisory committee at the time of the oral Candidacy Exam (see below).

All EOAS students will be required to take a ~ 3 hour oral examination, during which they will give a ~ 20 minute overview of their proposed research and undergo one or more rounds of open questioning by an examining committee. The questioning will be used to ascertain the student's knowledge level (both breadth and depth) over a range of topics that has been pre-determined prior to the exam. It is the responsibility of the examination committee to define the appropriate level of breadth and depth of knowledge required by the student. As part of the open questioning, the student may also be expected to defend some aspects of the research proposal (*e.g.* significance of research questions and relative strengths / weaknesses of methodological approaches). Additional examination formats, over and above the oral examination may be used at the discretion of supervisory committee<sup>1</sup>. The nature of these additional examinations must be made clear to the students in writing with at least 3 months prior notice.

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<sup>1</sup>The PhD Candidacy examination for ATSC students contains elements in addition to the oral exam. This program is jointly run with the Dept. of Geography and has structures agreed upon by groups across campus. Details of the ATSC comprehensive exam procedures are described at: <http://www.eos.ubc.ca/academic/graduate/atmos-phd.html#comp>

The committee for the oral examination will comprise the primary research supervisor, at least two other members of the supervisory committee, one external examiner and an exam chair. The external examiner (confirmed at least 2 months prior to the exam) should have a general understanding of the broad research area, but should not be on the student's supervisory committee or have a close involvement with the proposed research project. The exam Chair (confirmed at least 1 month prior to the exam) is any one of the EOAS Graduate Examiners identified for this role and may not be a member of the Supervisory Committee. A current list of EOAS PhD Candidacy Exam chairs is posted on the Dept. internal web under the committee assignments (Committee # 21, under Graduate Affairs). The Chair's role is to moderate the exam, document the results (see below) and ensure consistency and fairness across the department.

#### **PROCEDURES FOR ORAL EXAMINATION.**

The oral examination should consist of:

1. An oral presentation of the PhD research plan (preferably 20 minutes and not to exceed 30 minutes).
  2. A major round of questions from the committee members, based on approximate reverse order of proximity to the candidate, thus: (1) External examiner; (2) Members of supervisory committee (3) Research Supervisors (in reverse order of proximity if more than one).
  3. Additional rounds of questions can be allowed to address any important outstanding questions or to follow up directly on answers given during the first round. These additional rounds are optional (subject to reasonable time constraints and at the discretion of the examination chair).
  4. The student is asked to leave the room.
  5. The supervisor should first discuss the candidate's academic / research performance, providing information about possible situations that may have affected progress in the PhD program and performance during the Candidacy exam. This should be followed by an open discussion where each examining committee member provides comments on the quality of the student's research presentation and answers to questions.
  6. If the student is to be given a pass with conditions (see below), the nature of the conditions must be determined before asking the candidate to return.
  7. Once the candidate has been recalled, the result will be announced along with details of any necessary conditional pass requirements.
  8. The results of the PhD Candidacy examination will fall into one of four categories:
    - a. clear pass
    - b. pass with conditions
    - c. failure with the option to retake the examination once, within 6 months.
    - d. failure and dismissal.
  9. The Exam Chair will prepare a report on the exam and upload this using the GRADME tool. As per FOGS procedures, the Chair's report will separately address the
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adequacy of the research proposal, the quality of the oral presentation and the ease with which the candidate answered the questions or challenges from the exam committee. The report will also include the outcome of the exam (a – d, listed above), and details of any conditions required of the candidate.