# **3.6 Comprehensive Examinations**

## A. Doctoral Students

- B. Master's Degree
- C. Doctoral Degree

## D. Format for Remote Oral Exams

Comprehensive examinations are a critical step in degree completion in evaluating the relevant breadth of knowledge in master's and doctoral students. Throughout the process, the chair of the candidate's advisory committee has the obligation to maintain a scholarly atmosphere and to keep academic integrity and the student's best interest foremost.

#### **A. Doctoral Students**

- Doctoral students schedule their oral preliminary and final examinations in consultation with their advisory committees. It is the responsibility of doctoral students to contact committee members and, where appropriate, the appointed Graduate School Representative to establish a date and time convenient to all members before officially requesting that the examination be scheduled. The Graduate School, upon approval, will send notification of the exam date to the committee and Graduate Representative. For both preliminary and final oral examinations, the Graduate School requires that DGPs submit a Request to Schedule Doctoral Oral Examination form 10 working days prior to the proposed exam date. The 10-day window does not commence until all other requirements are completed, including a final, approved Plan of Work and a Patent Agreement.
- Two weeks prior to the final examination, the student must also provide the committee with a copy of the dissertation. This deadline may be earlier in cases that involve research directly funded by a company (see Section 3.7 Theses and Dissertations)

#### **B.** Master's Degree

- 1. Written examinations (Optional)
- A degree program may require written examinations covering the subject matter of the major and the minor in which the student is enrolled. When required, such examinations must be successfully completed prior to the submission of a <u>Request for a Permit to</u> <u>Schedule the Master's Oral Examination</u>. Information concerning written examination schedules should be obtained from the student's program.
- 2. Oral examinations
  - Candidates for master's degrees (except those in Option B programs) must pass a comprehensive oral examination to demonstrate to the advisory committee that they possess a reasonable mastery of the subject matter of the major and minor fields and that this knowledge can be used with promptness and accuracy.
  - (a) Scheduling an exam

- Master's students schedule their oral examinations in consultation with their advisory committees. To do this, students must submit a <u>Request for a Permit to</u> <u>Schedule the Master's Oral Examination</u> to their DGPs who approve and submit it to the Graduate School **two weeks prior to the date of the examination**. The two-week window does not commence until all other requirements are completed, including a final, approved Plan of Work and a Patent Agreement.
- (b) Format of the exam
- This exam takes the form of a traditional thesis defense in those programs requiring theses. This examination may not be held until all other requirements, except completion of the coursework taken during the final semester, are satisfied. After obtaining DGP approval, a student must file a <u>Request to Schedule Master's</u> <u>Oral Examination</u> with the Dean of the Graduate School only after the above conditions are met. For students in non-thesis, non-Option B master's, the program determines the format of the oral exam.
- (c) Passing the oral examination
- Within a week of completing the exam, the student's DGP must forward a permit form (<u>Admission to the Final Master's Oral Examination</u>) that displays the date that the exam was conducted, the result of the examination, and the signatures of all advisory committee members to the Graduate School. *A unanimous vote of approval of the advisory committee is required for passing the oral examination*.
- (d) Conditional pass
- Students may get a conditional pass contingent upon completion of additional work to the satisfaction of the advisory committee. A formal re-examination may not be required in this case. The DGP must notify the Graduate School within a week after the exam of the conditional pass, the reasons for the conditional pass, and also when the conditions have been removed. The date upon which the Graduate School is notified of the pass establishes the student's graduation date.
- (e) Failure to pass the oral examination
- A student who fails the oral examination is terminated from graduate work at NC State unless the graduate advisory committee unanimously requests a reexamination. Only a single re-examination will be allowed. If the DGP or the Graduate School denies the request, the student's program is terminated.

## **C. Doctoral Degree**

#### **Preliminary examinations**

Each doctoral student is required to take a preliminary examination, consisting of written and oral components, after they have completed their coursework. As indicated in Section 3.4, all doctoral students must attain candidacy for the degree within six calendar years from the date of admission.

#### 1. Preliminary written examinations

(a) Format of the exam. The written portion of the examination may be conducted in one of two ways.

- (i) Each member of the advisory committee prepares a set of questions for the student's response, and the answers to each set are returned to the appropriate faculty member for evaluation. The professor decides on the specific format of this exam.
- (ii) Standardized departmental examinations may be used for all students in a program. These examinations are given at specified times during the year, and scheduled dates must be announced at least a semester in advance. Where written departmental examinations of this kind are used, the student will be expected to notify the department of their intent to sit for this examination.
- Regardless of which method is employed, the questions involved may cover any phase of the coursework taken by the student during graduate study or any subject logically related to an understanding of the subject matter in the major and minor areas of study. The questions are designed to measure the student's mastery of his/her field and the adequacy of preparation for research.

(b) Notification of completion. Committee chair(s) must notify the DGP when a student has completed the written examination.

## 2. Preliminary oral examinations

- The oral examination is designed to test the student's ability to relate factual knowledge to specific circumstances, to use this knowledge with accuracy and promptness and to demonstrate a comprehensive understanding of the field of specialization and related areas.
- Upon satisfactory completion of the written portion of the preliminary examination, the DGP must submit a <u>Request to Schedule the Doctoral Oral Examination</u> to schedule the preliminary oral examination. If the Graduate School Representative has already been assigned to the student's committee, then the Graduate School will respond to the request within one week of its receipt. If the Graduate School Representative has yet to be assigned, the Graduate School may take up to two weeks to respond to the request.
- After the Graduate School has approved the scheduling of the preliminary oral examination, the signed and dated request form is emailed to the committee chair, committee members, Graduate School Representative, and graduate student listed on the form.

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- (a) Format of the examination. Though the format of the oral preliminary examination may vary according to the culture of individual graduate programs, as a general guideline such examinations generally include the following three elements.
  - (i) **Presentation by the candidate.** The candidate makes a presentation of a research proposal. This presentation may be open if the program wishes it to be, but NC State graduate faculty may not be excluded, and the committee chair or Graduate School Representative can restrict the session to all but graduate faculty as deemed necessary.

- (ii) Questioning of the candidate. Anyone attending the presentation will be allowed to ask questions of the candidate at the conclusion of the presentation.
- (iii) **Deliberation and decision.** Only the advisory committee and the Graduate School Representative, if one has been appointed, will be allowed to participate in the deliberation and decision.
- (b) Outcomes

(i) Passing the preliminary examination. A unanimous vote of approval of the advisory committee is required for passing the preliminary examination. Approval may be conditional, however, and require students to meet specific requirements prescribed by their advisory committee. These conditions must be written in a clear and distinct way and communicated in such a manner that the student clearly understands what is expected; they must also be submitted to the DGP and the Graduate School.

### (ii) Failure to pass the preliminary examination.

• A student who fails the preliminary examination is terminated from graduate work at NC State unless the graduate advisory committee unanimously requests a re-examination. Only a single re-examination will be allowed; it can encompass written, oral, or both components as determined by the advisory committee. If the DGP or the Graduate School denies the request, the student's program is terminated.

#### 3. Candidacy

- A doctoral student is admitted to candidacy by the Graduate School upon successfully passing the preliminary examinations. This does not include students receiving a conditional pass.
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- 4. Final Oral Examination
- As with the preliminary oral examination, the chair of the student's advisory committee oversees the final oral examination. Students in consultation with their advisors submit a <u>Request to Schedule the Doctoral Oral Examination to their DGP</u>, indicating that they wish to schedule the final oral examination.
- The final oral examination is scheduled after the dissertation is complete except for such revisions as may be necessary as a result of the examination, but not before all required coursework has been completed.
- After the Graduate School has approved the scheduling of the final oral examination, the signed and dated request form is emailed to the committee chair, committee members, Graduate School Representative, and graduate student listed on the form. A file copy of the approved request form will be sent to the DGP.

- The student should be sure to include the most current title of the dissertation, as the Graduate School mails information about the scheduled examination to the NC State Official Bulletin for publication.
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- (a) Format of final examination. Though the format of the doctoral examination may vary according to the culture of individual graduate programs, all examinations include three elements:
  - (i) **Presentation by the candidate.** The candidate typically presents the methodology used, the data collected, and the conclusions reached as reported in the dissertation. For the purpose of dissemination of research, it is required that the presentation of the dissertation be open to the university community.
  - (ii) Questioning of the candidate. Any member of the university community is allowed to ask questions of the candidate. The questioning phase may continue with a closed session in which the advisory committee questions the candidate.
  - (iii) Deliberation and decision. Only the advisory committee and the Graduate School Representative are present.
- Throughout the process, the chair of the candidate's advisory committee has the obligation to maintain a scholarly atmosphere and to keep academic integrity and the student's best interest foremost.
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- (b) Outcome of final examination
  - (i) Passing the final oral examination. A unanimous vote of approval of the advisory committee is required to pass the final oral examination. In the case of a conditional pass, the specific requirements must be submitted to the student as well as the Graduate School attached to the Exam Results form. Final approval by the advisory committee is dependent upon a student's successful completion of those conditions.
  - (ii) Failure to pass the final oral examination. Should a student fail the final examination, this terminates a student's academic program unless the advisory committee recommends a re-examination.

#### **D.** Format for Remote Oral Exams

It is expected that oral examinations be conducted with all parties in the same room; however, it is recognized that circumstances may prevent this from happening. While technology can provide solutions for such situations, it should never be the case that remote exams are held simply as a matter of convenience. The student and major professor or at least a co-chair must be present in person.

When members attend examinations remotely, it is the responsibility of the chair of the committee to maintain the academic integrity of the exam and to ensure that the spirit of the requirements outlined in 3.6.B or 3.6.C above are followed. The technology used must allow all

parties to interact visually and aurally to accomplish this. Failure of the technology during the exam will require that the exam be suspended until it is in functioning order or rescheduled for a later time.

It is the DGP's responsibility to ensure that the reasons for a remote exam are valid and to submit a request to conduct the exam to the Graduate School in conjunction with the Request for a Permit to Schedule the Master's or Doctoral Oral Examination.

