

## Comprehensive Exams

### CMB Contacts

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Details of the Comprehensive Exam can be found in the [CMB Student Handbook](#).

### Examination Committee

- The comprehensive exam committee is comprised of the Guidance Committee minus the Research Mentor. The CMB Program Representative serves as the chair of the committee.
- The Mentor is permitted to listen to the proceedings via an web-based method such as Zoom, but must turn off his/her video and audio must remain muted.

### Timeline & Scheduling

- The comprehensive exam is taken by the end of the 7<sup>th</sup> semester of graduate study (the Fall semester of Year 3).
- The student is responsible for setting the date for the oral presentation and closed questioning.
- Two weeks prior to the date of the comprehensive exam, the student must submit the written comprehensive exam to all members of the guidance committee.

### Components of the Exam

- Written proposal, following one of two styles provided [here](#), which are similar to NIH and USDA training proposals. Students should discuss their aims and experimental approaches with the Research Mentor, who may offer guidance with proposal development, especially with respect to grantsmanship. The mentor may not, however, directly edit or re-write the proposal.
- Formal oral seminar , 35-45 minutes in length and open to all faculty and students. Members of the audience, excluding the examination committee, are encouraged to ask questions to the student.
- Closed questioning by the comprehensive exam committee (see below).
- For exams conducted via Zoom, separate links should be created for the seminar and the closed questioning. Both should be password-protected.

### Conduct of the closed questioning component of the exam

- After the oral seminar, the audience and student and Exam committee may take a 10-15 minute break as needed.
- At the start of the closed questioning, the student is excused from the room (or for Zoom conferences, placed in a waiting room), during which time the committee discusses how the exam will proceed (see below). The chair of the examination committee also asks the committee members whether there are any questions or concerns about the written portion of the exam, or about the oral seminar.
- The student is called back into the room/video conference and is told how the exam will proceed.
- Closed questioning proceeds in a round table format, with all members of the committee being given equal opportunity to question the student. Generally, questions arise directly from the written proposal and oral seminar, and may stem/follow up from prior questions asked by audience members or other committee members. Questions can deviate off the direct subject matter, but generally remain reasonably applicable to the topic of the student's proposal and seminar.

- Often, during a student's response, committee members interject each other's questions for clarification or follow-up, but it should be agreed upon by the committee prior to the closed questioning that this is acceptable to all members.
- Typically, questioning by each committee member, including interjections, lasts for 15-20 minutes, but may last longer. There are usually two rounds of questioning from each committee member, but members are given the opportunity to ask a third round of questions as needed.
- At the conclusion of questioning, the student is excused from the room/placed in a waiting room, and the committee discusses the student's performance. The committee votes on performance in the exam, each member submitting a Pass or Fail outcome. Possible outcomes of the exam are:
  - Pass. Usually this is arrived by unanimous vote. If a unanimous decision cannot be reached, one dissenting vote is allowed.

The committee may recommend or require rewriting of the research proposal, execution of laboratory procedures, or other alternatives that the examining committee regards as appropriate to the candidate. In the case that the Committee identifies a correctable deficiency, they will specify remediation in writing, with a time limit for satisfactory completion.

- Pass with Honors. Requires a unanimous passing vote, and is reached if the committee unanimously agrees that the student performed exceptionally well in all three portions of the comprehensive exam.
  - Fail. If a fail decision is reached by the committee, the committee will give specific recommendations for the remediation in writing. The student may be allowed to retake one or more portions of the exam as determined by the committee.
- After the committee has reached a decision, the student is asked to re-enter the room and informed of the outcome, including any deadlines for re-writing of the proposal and/or retaking of the exam. At the discretion of the examining committee, a discussion may be held with the research mentor at the conclusion of the exam.
  - The [Preliminary Exam Report](#) form should be completed by the Comprehensive Examination Committee Chairperson, signed by each committee member, and returned to the Graduate Program Coordinator within two weeks of the examination date.