

Department of Human Physiology Doctoral Candidacy Comprehensive Examination Policy

The Doctoral Candidacy Comprehensive Examination (or Comprehensive Exam) is a series of written and oral examinations which addresses the primary subject areas of the field of human physiology. This exam is taken after the majority of required course work has been completed, unless specifically waived by the committee, and after most of the requirements for the degree, except completion and defense of the dissertation, has been satisfied. After successful completion of the comprehensive exam, the student is advanced to candidacy and may then present their dissertation research proposal.

Philosophy

The comprehensive exam is based on the philosophy that a doctoral candidate needs both a breadth and depth of knowledge about human physiology to be successful as either a teacher or a researcher. In many ways, the comprehensive exam marks a turning point in the training of a doctoral student, from being a student of the field, to becoming an expert on a particular research topic or subspecialty. Along these lines, it is the final test of the student's global knowledge about the field, and should ascertain whether the student is adequately prepared to take on the role of instructor of human physiology. It is also a test of the student's knowledge of and ability to assimilate the primary research literature within their field and should ascertain their readiness to embark on the line of research that will constitute their doctoral dissertation.

Content

Many consider this the highest level of exam offered in academics. At the doctoral level, it is insufficient to merely recall facts; students must also demonstrate the ability to use their knowledge base to explain observations or synthesize ideas relevant to the field. Also, students must demonstrate the ability to organize information succinctly to address questions of key interest in the field. The exam content is determined by the student's advisor and the student's program committee members, all of whom serve as the examiners. As such, it is important that the student establish their program committee early on, preferably by the end of their first term as a doctoral student, so that they may participate in the selection of courses in the student's program of study. The committee must be finalized at least 6 months prior to the student's exam and the committee should review and approve the student's completed coursework prior to the exam.

Examiners

The examiners, or exam committee, are in general the student's advisor and the student's program committee. The committee must include the advisor and at least two other individuals. All committee members must hold terminal degrees and faculty-level appointments (or their equivalent in clinical practice) and have relevant experience to serve on the committee. In addition to the student's advisor, at least one committee member must hold a primary appointment in the Department of Human Physiology. At the discretion of the advisor, the committee may have additional members if they are needed to ascertain the student's knowledge in a particular area.

Format

Part A is a take-home exam in which the student writes independently on two questions which are formulated to test the student's knowledge of, and ability to assimilate, the primary research literature within their field.

Part B is a closed-book exam in which the student writes independently on two questions which are formulated to test the student's global knowledge about the field, and should ascertain whether the student is adequately prepared to take on the role of instructor of human physiology. The questions are comprehensive and integrate the student's coursework and interests in a way that goes beyond course examination questions.

Part C is the oral exam in which the student must address questions related to both Parts A and B and any other material the examiners deem necessary to ascertain the student's breadth and depth of knowledge about human physiology.

Scheduling

The committee must be finalized at least 6 months prior to the student's exam and the committee should review and approve the student's completed coursework prior to the exam. Once the committee has approved the student's completed coursework, the student may schedule both their written (Parts A and B) and oral exams (Part C). Either written part can be scheduled first, but the students should schedule their oral exam to follow no less than 14 days after the completion of the written exam. Should it be necessary for a student to retake any part of the exam, the committee will determine the appropriate time interval that will provide the student with a reasonable opportunity to improve their performance on that part of the exam.

Language

English is recognized as the international language of science and students must be able to communicate their knowledge in that language. Students may have access to English language assistance from Academic Learning Services for Part A but not for Part B or C of the exam. Outside assistance with writing undermines the ability of the committee to assess how well the student organizes their thoughts on a topic.

Grading

Each of the four written exam sections (two questions from Part A and two questions from Part B) will be assigned a grade of Satisfactory, Marginal, or Unsatisfactory by the Committee. A grade of Satisfactory indicates that the student's performance on that section was at the level expected of a doctoral candidate. A grade of Marginal indicates the student's performance on that section was not as strong as is expected of a doctoral candidate, but that they may be able to redress this poor performance by a stronger performance during the oral exam. A grade of Unsatisfactory indicates that the student's performance on that section was below what is acceptable for a doctoral candidate and it is unlikely that this performance can be redressed during the oral exam.

Any portion of the written exam on which the student receives a grade of Unsatisfactory must be redone by the student. The student has only one opportunity to redo each Unsatisfactory section of the written exam. In general, the student will not be asked to redo any portion of the exam which receives either a Marginal or a Satisfactory grade. The student may not take the oral exam until they achieve a grade of Marginal or Satisfactory on all four sections of the written exam.

After the oral exam, the student will be assigned a grade for the entire exam of Pass or No Pass by the Committee. A Pass indicates the student's performance was as strong as is expected of a doctoral candidate. A No Pass indicates that the student's performance was below what is acceptable for a doctoral candidate and the student may not progress to candidacy. The student has only one opportunity to redo the oral exam. In general, the student will not be asked to redo any portion of the written exam prior to redoing the oral exam. However, at the committee's discretion, the student may be asked to redo a portion of the written exam on which the student received a grade of Marginal prior to redoing the oral exam. A student who fails to Pass the exam on their second attempt will be dismissed from the doctoral program. There is no "Conditional Pass" option.

Misconduct

The written exam should be produced exclusively by the student without assistance from others. References used as experimental evidence to support ideas must be properly cited. There is seldom reason to include verbatim statements, but if they are included, they must be surrounded by quotation marks and properly cited. References must be cited whenever the student uses previously published ideas and theories unless this information is considered part of the common knowledge of the field of human physiology as would be covered in a textbook. Violations of academic conduct are taken seriously by the committee. Students unfamiliar with any aspect of academic misconduct are encouraged to see the following resources: <http://darkwing.uoregon.edu/~conduct/sai.htm>; <http://libweb.uoregon.edu/guides/plagiarism/students/>

Guidelines Specific to Each Part of the Exam

Guidelines for Part A

Part A is a take-home exam in which the student writes independently on two questions which are formulated to test the student's knowledge of and ability to assimilate the primary research literature within their field. The student is able to access their own notes, book, and journal articles but must reference these sources as appropriate. The student may not discuss their exam question with anyone other than their advisor or a committee member who is delegated as responsible for a particular question, and may only do so in order to clarify the question, not to discuss the answer to the question.

It is expected that the student will demonstrate the ability to synthesize the literature in their own scholarly voice and apply a level of critical analysis to the current literature. Thus, discussion of the literature should contain not only the general postulates, but acknowledgment of weaknesses and omissions in theory development or experimental results.

The student has one week, from the time they receive the exam, to complete the exam and return it to their advisor for distribution to the committee. The questions are not known in advance, but a general direction may be suggested by the advisor and committee. In order to clarify expectations, the advisor and committee may provide the student with a reading list of articles or book sections prior to the exam.

Suggestions for the student:

- Recognize that the question may not have a clearly right or wrong answer. In such cases, the student may need to decide between arguing a weak position and providing the evidence for or against both sides. In either case, the experimental evidence from the literature should be used to support any claims.
- Consider including the following elements: an introductory paragraph outlining the issues or organization of the written response, a discussion of appropriate theories, citation of empirical research to support ideas, identification of contemporary debate in the scientific community, and a summary or concluding paragraph.
- Be concise, but thorough. Limit each of the two questions to 10 pages of double-spaced text in a standard font and size (e.g., Times New Roman 12 pt or Arial 12 pt). References are excluded from this page limit. Drawn figures are not included in the page limitation.
- Avoid the use of direct quotations.
- Read questions carefully and make sure that all parts of a question have been addressed. Failure to answer a part of a question is a simple but costly mistake and could require a redo of a section of the exam.
- Take time to proof-read all sections of Part A and be sure to check for spelling and grammatical errors.

Guidelines for Part B

Part B is a closed-book exam in which the student writes independently on two questions which are formulated to test the student's global knowledge about the field, and should ascertain whether the student is adequately prepared to take on the role of instructor of human physiology. The questions are comprehensive and integrate the student's coursework and interests in a way that goes beyond course examination questions.

The student does not have access to notes, book, or journal articles during the exam but will be provided with a computer for typing their answers to the questions. The student may not discuss their exam question with anyone other than their advisor or a committee member who is delegated as responsible for a particular question, and may only do so in order to clarify the question, not to discuss the answer to the question.

It is expected that the student will demonstrate the ability to write in their own scholarly voice about a diverse number of topics related to the field and demonstrate the global knowledge necessary to be teach the field at all levels.

The student has 6 hours from the time they receive the exam, to complete the exam and return it to their advisor for distribution to the committee. The questions are not known in advance, but a general direction may be suggested by the advisor and committee.

Suggestions for the student:

- As with Part A, recognize that the question may not have a clearly right or wrong answer.

- Consider including the following elements: an introductory paragraph outlining the issues or organization of the written response, a discussion of appropriate theories, reference to well-known studies that support ideas, identification of contemporary debate in the scientific community, and a summary or concluding paragraph.
- Be concise, but thorough. Limit each of the two questions to 10 pages of double-spaced text in a standard font and size (e.g., Times New Roman 12 pt or Arial 12 pt). References are generally not used in Part B. Drawn figures are not included in the page limitation.
- Read questions carefully and make sure that all parts of a question have been addressed. Failure to answer a part of a question is a simple but costly mistake and could require a redo of a section of the exam.
- Take time to proof-read all sections of Part B and be sure to check for spelling and grammatical errors.

Guidelines for Part C

After turning in Part A and B, it is recommended that the student spend time reviewing these sections so as to recognize the limitations in their written answers and prepare to demonstrate improvement and mastery of the material during Part C. Students will have access to a copy of their written exam to review during this time, but generally do not receive direct feedback from the committee on these sections. However, the advisor and committee may comment to the student as they see fit, in an effort to guide the student's preparation for Part C.

It is expected that the student will demonstrate the ability to think on their feet and articulate their thoughts in a scholarly way about a diverse number of topics related to the field. It is expected that the student will demonstrate a breadth and depth of knowledge necessary to teach the field at all levels and mastery of the research principles and findings within their field.

A minimum of three examiners must be present for the entirety of Part C, which is generally 2-3 hours in length. The examiners may question the student about their answers from Part A and B or any topic that is deemed necessary to ascertain the student's breadth and depth of knowledge about human physiology. The student does not have access to notes, book, or journal articles during the exam but may have a copy of their written exam. Once the student has completed their oral exam, they will be asked to leave the room while the examiners deliberate on the success of the examination.

Suggestions for the student:

- Do not read from your exam to answer a question.
- Recognize that the questions may not have a clearly right or wrong answer.
- Ask for clarification of any question that is not understood, rather than trying to answer a question that is not clear.
- It is better to recognize and indicate to the committee when you do not know the answer to a question, rather than attempting to fish for an answer.