**PhD Nutritional Sciences, University of Hawai‘i at Mānoa**

Dissertation Proposal and Comprehensive Exam

(Form II- Advance to Candidacy)

In order to Advance to Candidacy in the PhD in Nutritional Sciences Program students must meet the written Comprehensive Exam requirement and the Dissertation Proposal Exam requirement. For the PhD in Nutritional Sciences Program these two exams will be combined as described below.

**Dissertation Proposal Defense and Comprehensive Exam** (Graduate Division Form II): Students are required to defend their dissertation research proposal and pass the comprehensive exam to the satisfaction of their Advisor and selected committee. The Dissertation committee should be comprised of five faculty total, made up of three graduate faculty members in addition to the Advisor, and the University Representative. A majority of the committee must belong to the Nutrition Graduate faculty while one of the graduate faculty members must be a tenured faculty member from a graduate program other than Nutrition, selected to serve as a university representative. The Dissertation committee must be approved by the Nutrition PhD Graduate Program Chair.

**Purpose**

The purpose of the combined Dissertation Proposal and Comprehensive Exam is to determine the student’s comprehension of fundamental nutrition knowledge, expertise in any related discipline important to his/her plan of study, and competence in research, effective communication, and critical thinking skills as exemplified in the written and oral Proposal Defense. The Dissertation Proposal Defense and Comprehensive Exam serves as a capstone that assures that the student demonstrates sufficient research skills and has prepared an independent, feasible research plan, in order to proceed with the dissertation research. This examination can only be completed after the student has passed his/her Nutrition qualifying exam and has completed a majority of required coursework.

Proposals should be written to cover the relevant areas of the student’s research work as represented by the student’s Dissertation committee members, whose expertise is related to the student’s proposed research. When the student and his/her Dissertation Advisor have determined that the student is ready to take the Dissertation Proposal and Comprehensive Exam, the student should meet with each member of his/her Dissertation committee for content area expectations. When the student meets with a committee member, the committee member should provide guidance on the content areas that will be covered on his/her portion of the exam. However, the student should expect that the required content areas are broad and integrative in scope.

**Dissertation Proposal & Comprehensive Exam Procedures**

The combined dissertation proposal and comprehensive exam will consist of a written dissertation research proposal and an oral presentation of the proposed dissertation research. Guidelines for the written proposal are provided in a section below. Based on the committee members’ preference, the student will provide a paper copy or an electronic copy one month in advance of the scheduled oral Dissertation Proposal Defense and Comprehensive Exam. The student, in consultation with his/her Primary Advisor, should apprise the PhD in Nutritional Sciences Program Graduate Chair of the planned oral defense date.

The Dissertation Proposal Defense and Comprehensive Exam is prepared by an examining committee composed of the student’s Dissertation committee and the exam is administered by the student’s Primary Advisor. One week before the oral exam, at the request of the Primary Advisor, the committee members will apprise the Advisor of their assessments of the student’s performance on the dissertation proposal and outline their areas of query relevant to the comprehensive exam. This latter step is to prevent redundancy of topics and allow for postponement of the exam should the committee member(s) ascertain the student is not ready for the Exam.

On the day of the exam, the exam begins with a private session of the Dissertation committee to discuss the written proposal and the order of questioning during the oral exam. When the student rejoins the committee, the student’s oral presentation, which focuses on presentation of the proposed dissertation research, will commence. After the presentation, questions will be asked by individual faculty members in the previously established order. The Dissertation committee members will assess the student’s knowledge of his/her area of expertise through questions related to the student’s dissertation proposal. The oral exam should not take longer than 3 hours.

At the end of the oral exam, the committee will discuss the student’s performance on the written dissertation proposal and the oral exam sections. Performance on the exam will be based on the rubric below (Table 1). The Primary Advisor is responsible for ensuring the PhD in Nutritional Sciences Program Dissertation Proposal and Comprehensive Examination Grading Rubric Form is distributed to and collected from committee members at the time of the exam. If the committee agrees that the performance met or exceeded their expectations, then the student will have passed the Dissertation Proposal and Comprehensive Examination. If the committee agrees the exam performance was not strong (i.e., did not meet or marginally met expectations), then the student will not have passed the Dissertation Proposal and Comprehensive Examination. Form II should be signed according to this result. The exam is repeatable once after successful petition to the PhD in Nutritional Sciences Program Graduate Chair. After passing the exam the student is eligible to enroll for dissertation research credit (FSHN 800).

The Primary Advisor collects the completed PhD in Nutritional Sciences Program Dissertation Proposal and Comprehensive Examination Grading Rubric Forms from each member of the Dissertation committee and tabulates the scores (per instructions on bottom of the Form). The completed forms should be submitted to the Graduate Chair no more than 2 days after the examination.

The examination criteria and procedures will conform to the Graduate Division’s standards for all Mānoa doctorate programs (http://manoa.hawaii.edu/graduate/content/doctorate). A student must pass this exam to achieve Doctoral candidacy and to remain in the PhD program.

**Table 1. PhD Nutritional Sciences Dissertation Proposal and Comprehensive Examination Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student Name: |  | | Date: |  |
| Committee Member Name: | |  |  |  |
|  | |  |  |  |
| **Level** | **Expected Performance** | | **Please circle the appropriate rating for each of the 8 levels below** | **Comments** |
| Literature Review  *SLO1, SLO2,*  *SLO5*  *ILO1, ILO4* | Up to date. Contextualizes the problem.  Clearly articulates gap in knowledge being addressed by the proposed dissertation.  If relevant, contains table of key papers addressing topic. Contains conceptual framework.  Clearly states research questions. | | 1. Does not meet 2. Marginal 3. Meets 4. Exceeds |  |
| Methods  *SLO4*  *ILO2, ILO3* | Applies appropriate and rigorous methods.  Methods align with the research question/hypothesis and theory.  Identifies study groups.  Identifies study design.  Identifies measurements to be used.  Points out the advantages and disadvantages of each method/measurement used.  Presents plan for statistical analysis | | 1. Does not meet 2. Marginal 3. Meets 4. Exceeds |  |
| Analysis  *SLO4*  *ILO2, ILO3, ILO4* | Aligns with research questions/hypotheses.  Is replicable. | | 1. Does not meet 2. Marginal 3. Meets 4. Exceeds |  |
| Original Contribution  *SLO4*  *ILO1, ILO3, ILO4* | Expands or alters thinking of the field. | | 1. Does not meet 2. Marginal 3. Meets 4. Exceeds |  |
| Nutrition knowledge  *SLO1*  *ILO1, ILO5, ILO7* | Responses to questions demonstrate synthesis of knowledge in nutrition. | | 1. Does not meet 2. Marginal 3. Meets 4. Exceeds |  |
| Interdisciplinary knowledge  *SLO2,*  *ILO1, ILO5, ILO7* | Responses to questions demonstrate synthesis of knowledge in nutrition & nutrition’s application to specialty field(s). | | 1. Does not meet 2. Marginal 3. Meets 4. Exceeds |  |
| Dissemination  *SLO7*  *ILO5* | Communication is effective, skillfully presenting arguments in support of thesis. Responses to questions exhibit superior breadth and depth of knowledge in subject area. | | 1. Does not meet 2. Marginal 3. Meets 4. Exceeds |  |
| Research Ethics  *SLO6*  *ILO6, ILO7* | Demonstrates honesty, objectivity, integrity, carefulness, openness, confidentiality, responsibility, competence, protection of participant rights, and consideration of and respect for cultural perspectives. | | 1. Does not meet 2. Marginal 3. Meets 4. Exceeds |  |

Modified from material developed by the University of Hawaiʻi at Mānoa Assessment Office

\* A student is considered to have passed the examination if all 8 levels (literature review, methods, analysis, original contribution, interdisciplinary knowledge, nutrition knowledge, dissemination, and research ethics) are given a 3 (Meets) or above (4 = Exceeds) with no more than one 2 (Marginal) designation. Scoring is completed as a mean of all committee members’ scores. The student’s Advisor will be responsible for adding Dissertation committee member scores.

Program Student Learning Outcomes (SLO):

SLO 1: Comprehensive understanding of core nutrition knowledge

SLO 2: Advanced scholarship in a specialty area

SLO 3: Students will demonstrate multi-disciplinary perspectives when forming research questions, designing research, drawing inferences, and articulating implications of research findings through the exposure to social and career-building disciplines.

SLO 4: Develop skills in research methodologies demonstrated by conducting original scholarly research,

SLO 5: Develop skills in grant writing

SLO 6: Understand research ethics

SLO 7: Effectively disseminate research findings via peer-reviewed publications, seminars and practical applications such as teaching

Advance Degree Institutional Learning Outcomes (ILO):

ILO 1: Comprehensive knowledge

ILO 2: Understanding of research methodology

ILO 3: Research methodology and/scholarly inquiry techniques

ILO 4: Critically analyze and synthesize information and data

ILO 5: Communicate appropriately

ILO 6: Responsible, ethical, professional conduct of research

ILO 7: Interact professionally

**PhD in Nutritional Sciences Program Dissertation Proposal Format Guidelines**

These are guidelines put forth by the Nutrition program. The Primary Advisor, together with the dissertation committee will ultimately decide the format they require for the student. For example, if the student is applying for research funding, they might choose to follow the funding agency’s format. The provided guidelines follow the USDA proposal format. Other agency guidelines such as NIH and NSF can also be followed.

The PhD in Nutritional Sciences Program recommends a Dissertation Proposal APA or AMA guidelines, such as double spacing, minimum of 12 point font, and 1 inch margins. The proposal should contain the following sections:

1. **Project Summary/Abstract**
   * Should be a short concise description of research in the applicant’s proposed doctoral program. It should include:
     1. Name of institutions of the pre-doctoral candidate and primary mentor;
     2. Predoctoral application title;
     3. Primary and specific Foundational Program Area(s) of the proposed project:
        + Plant health and production and plant products;
        + Animal health and production and animal products;
        + Food safety, nutrition, and health;
        + Bioenergy, natural resources, and environment;
        + Agriculture systems and technology;
        + Agriculture economics and rural communities.
     4. If applicable, the Challenge Area(s) the proposed project addresses:
        + Agriculture and Natural Resources Science for Climate Variability and Change;
        + Childhood Obesity Prevention;
        + Food Safety;
        + Food Security;
        + Sustainable Bioenergy; and
        + Water Resources.
2. **Project Narrative** 
   1. Please use 12-point font and line spacing not exceeding six lines of text per inch with ½ inch margins, include figures and tables as needed.
      1. Project Plan

* Introduction
  + Literature review: should include a table of key papers in the selected field and justification of the gap in knowledge filled by the research.
  + Research Question(s)
  + Problem Statement
* Rationale
* Approach
  + Methods: should include a description of the proposed study groups, measures and statistical analyses; a figure on the theoretical framework should also be included.
  + Limitations
  + Timeline

1. **Bibliography & References Cited**
2. **Facilities & Other Resources**
3. **Equipment**
4. **Budget & Budget Narrative**

1 Modified from the University of Connecticut Department of Educational Psychology Dissertation Proposal Guidelines (http://www.gifted.uconn.edu/dpg/writdiss.html)