Interdisciplinary Health PhD Colleges of Health and Human Services and Social and Behavioral Sciences

GRADUATE STUDENT HANDBOOK 2021



Interdisciplinary Health PhD Program

Table of Contents

CHAPTER 1: PROGRAM OF STUDY OVERVIEW	3
STUDENT LEARNING OUTCOMES	3
DEGREE REQUIREMENTS	4
ENROLLMENT REQUIREMENTS	5
GRADE REQUIREMENTS	6
GRADUATE COLLEGE INFORMATION	6
CHAPTER 2: DOCTORAL DISSERTATION COMMITTEE SELECTION	7
CHAPTER 3: COMPREHENSIVE EXAMINATION	8
Overview	8
SCHEDULE OF THE COMPREHENSIVE EXAMINATION	9
FORMAT OF THE COMPREHENSIVE EXAMINATION	9
CONTENT OF THE COMPREHENSIVE EXAMINATION	10
EVALUATION AND GRADING OF THE COMPREHENSIVE EXAMINATION	11
NOTIFICATION OF THE COMPREHENSIVE EXAMINATION RESULTS	11
CHAPTER 4: DISSERTATION RESEARCH PROSPECTUS	12
DISSERTATION PROSPECTUS	12
CHAPTER 5: ADVANCEMENT TO CANDIDACY	15
ADVANCING TO CANDIDACY PROCEDURES	15
RESEARCH COMPETENCY REQUIREMENT	15
CHAPTER 6: DISSERTATION RESEARCH	
POST-CANDIDACY (DISSERTATION RESEARCH)	16
ACCEPTABLE FORMATS	16
CHAPTER 7: DISSERTATION DEFENSE AND DEFENSE SEMINAR	18
CHAPTER 8: APPLICATION FOR GRADUATION	20
CHAPTER 9: FINANCIAL ASSISTANCE	
CHAPTER 10: GRADUATE ASSISTANT EXPECTATIONS	23
CHAPTER 11: STUDENT RESPONSIBILITY	_
ETHICAL RESEARCH CONDUCT	
CHAPTER 12: OFFICE SPACE	
CHAPTER 13: SAMPLE STUDENT PROGRESSION PLAN	27

CHAPTER 1: PROGRAM OF STUDY OVERVIEW

Solutions to health-related issues are found at the intersection of the health and social sciences. The PhD in Interdisciplinary Health (IH) provides students with foundational skills in four core courses that cover 1) health and social science theory and application to health, 2) an overview of health-related research methods, and 3) grant-writing skills. The degree program also requires nine additional credits in analytic skills – statistics, research methods, and epidemiology, 12 credits related to one's area of research specialization, six credits in elective courses, and original and independent research. Graduates from this degree are trained for professional roles that address complex state, tribal, regional, national, and international health issues. Through coursework and research experience (including dissertation research), students work with faculty with expertise in one or more of the following areas: disability, health equity, psychosocial health. The IH PhD program's rigorous training in health theory and application, methodology, and scholarship prepares graduates for successful careers as health researchers, advocates, and educators.

Student Learning Outcomes

- 1. Apply, articulate, and evaluate fundamental knowledge in theoretical and methodological approaches and concepts relevant to interdisciplinary health-related issues.
- 2. Demonstrate advanced knowledge through critical inquiry and discourse: a) framing the need for research specializations at the intersection of health and social sciences, b) identifying contextual, theoretical, and practical limitations, and c) analyzing major theories, controversies, methodological challenges, and connections with related disciplines.
- 3. Design and conduct interdisciplinary health research/scholarship that demonstrates ability to a) summarize and assess previous theoretical and methodological contributions to the research area, b) formulate testable hypotheses, and c) identify, define, and apply appropriate methodology and analytic strategies.
- 4. Use and integrate data management and analytic software, systems, and tools of analysis appropriate to health-related research.
- 5. Demonstrate data interpretation skills with full consideration of strengths, limitations, and relevance to research question.
- 6. Clearly communicate research aims, problem statement, literature review, research methods/ design, broader impact, and other important grant application components when writing grant proposals.
- 7. Employ written, oral, and visual communication skills to present research questions, analyses, and results to specialist and non-specialist audiences.
- 8. Understand the ethical dimensions of professional integrity and scientific inquiry and apply this knowledge to develop ethical approaches to scientific inquiry, including research methodology, data collection, collaboration, and communication of findings.

Download the <u>Checklist for Doctoral Students</u>, which describes the steps that the Graduate College requires to complete a doctoral program at NAU. This Student Handbook follows the checklist requirements, with each chapter corresponding to a step in the checklist.

By the end of the third semester of coursework, in consultation with the Dissertation Chair, the student must submit a draft <u>Program of Study Form</u> to the Interdisciplinary Health PhD Program Director. The Program of Study outlines an individualized planned series of coursework and academic experiences for each student. It clearly specifies required courses and lists a tentative dissertation topic. The Dissertation Chair and Program Director must approve the final Program of Study, including any revisions of the Program of Study. The final Program of Study is submitted to the Graduate College with the Candidacy Application and Application for Graduation. Once a Program of Study has been approved, a student is expected to adhere to the Program.

The <u>Program of Study Form</u>, including any revised Programs of Study, must be copied to the IH PhD Program Director, the Dissertation Chair.

Degree Requirements

The PhD degree at NAU requires a minimum of 60 credit hours beyond the bachelor's degree. Of the 60 credits, 15 credits must be IH 799 (Dissertation Research). Additional units of IH 799 do not count toward the minimum credits total of 60. The remaining 45 credits are documented in the Program of Study (see above). All courses must be at the 500-level or higher.

Unless explicitly approved by the Interdisciplinary Health PhD Steering Committee (IHSC), an approved Program of Study may only include graded courses and not courses taken as P/F (with the exception of Graduate Research [685] and Dissertation [799]).

Course Prerequisites: Students should be aware some CHHS/SBS graduate courses have prerequisites that must be completed prior to enrollment.

Table 1. Required Coursework

	Credits	Catalog Number	Descriptions
	6	IH 701 and 702	Required interdisciplinary health seminars
	3	IH 601	Required methods course
	3	IH 602	Required writing course
	9	NAU Graduate	Analytic Skills*
	12	courses	Research Specialization Courses**
	6		Electives***
Pre-Candidacy Research	6+	IH 685	Required for candidacy; must demonstrate a research skill or competency approved by the program faculty and the University Graduate Committee. 1 credit will be taken in the 1 st semester with IH PhD Program Director
Comprehensive Examination			Written Exam

Dissertation			Oral and Written Exams	
prospectus				
Candidacy	15	IH 799	Dissertation; enroll only after advancing to candidacy	
TOTAL: 60 credits No more than a maximum of 18 hours of transfer credits from other graduate work				

- * Students are expected to meet the 9-credit requirement by taking analytical skills courses that build and extend existing knowledge.
- **Students are expected to meet the 12-credit research specialization requirement by taking courses that build and extend existing knowledge that is relevant to the area of expertise they are building as part of the program. The IH PhD offers three specialty areas: Disability, Health Equity, and Psychosocial Health.
- *** Students who require or elect to take further elective courses are encouraged to take courses that are relevant to the area of expertise they are building as part of the program. We encourage students to select elective courses in areas of scientific communication, health policy, medical anthropology, disability and wellness, global health, health psychology, statistics, research methods, and/or other applied courses (e.g., program evaluation). Areas not listed here can be considered in consultation with a student's Faculty Advisor. All Independent Study (697) and Graduate Research (685) courses require an approved IH individualized course contract approved by the Faculty Advisor and IH Program Director to be placed in the student's file prior to the start of the activity.

NOTE: As approved by the IHSC, a student may petition to transfer a maximum of 18 graduate credits toward the IH PhD program. The student must prepare materials for the <u>Petition for Transfer Credit Form</u> if courses are taken at a university other than NAU, including the course description, syllabus, and rationale for why it should be counted as meeting a current IH PhD requirement. The student's Faculty Advisor, and then the IHSC will review the request(s), render a decision, and complete the petition form. The number of credit hours that can be applied to each requirement area is limited: Analytic skills (no more than 6 of the 9 required may be approved for transfer credit), Research Specialization (no more than 6 of 12 required credits), or Electives (no more than 6 credit hours). NAU's <u>Requirements for the Doctoral Degree, PhD</u> policy includes requirements for time frames for transfer credit petitions.

Enrollment Requirements

Successful completion of the IH PhD Core courses (IH 601, IH 602, IH 701, IH 702) are required during Years 1 and 2. Students are allowed to enroll part-time in the IH PhD Program as long as these four courses are completed during Year 1 and Year 2 with the cohort with which they were admitted. The maximum graduate course load is 16 credits/semester. Graduate Assistants may take only 12 credits/semester. The minimum course load for full-time graduate students is 6 credits/semester. Graduate Assistants must maintain a minimum course load of 9 units/semester).

Grade Requirements

Please refer to <u>Academic Continuation</u>, <u>Probation</u>, <u>Dismissal</u>, <u>and Readmission - Graduate</u> for criteria outlining Good Academic Standing and academic probation.

All graduate students must maintain a GPA of 3.0 or better. Students must earn a minimum of a "B" grade in the required core courses (IH 601, 602, 701, and 702). Any student that earns a "C" in a core course will be required to complete an Academic Improvement Plan during the following semester and then retake the course when it is next offered. If the student does not earn a "B" or higher in the second enrollment of the core course, they will be recommended for dismissal from the program.

For all other program requirements, a maximum of six credits of "C" grades are allowed for graduation. A grade below a "C" does not earn graduate credit. A student will be placed on academic probation if they earn six or more credits of a "C." A student earning more than 6 credits of a "C" or below may not be allowed to continue in the program, regardless of their GPA. If a grade of a "D" or an "F" is received in a graduate course, students will be placed on probation and may be allowed to repeat that course, with the Faculty Advisor's approval. The repeated course does not replace the grade for the prior course; if a course is repeated, both grades are used in the computation of the overall grade point average (GPA). Units earned for repeated courses may only be used once to fulfill graduation requirements. To be eligible for graduation, students must have a 3.00 cumulative grade point average (GPA) for all courses on their graduate record, <u>as well as</u> a 3.00 GPA for the courses required on the Program of Study.

Graduate College Information

You are required to read and understand all guidelines and procedures for NAU graduate programs described by the <u>Graduate College</u> and within the <u>Academic Catalog</u>.

CHAPTER 2: DOCTORAL DISSERTATION COMMITTEE SELECTION

In consultation with the Faculty Advisor, the student should select the Dissertation Committee. In consultation with the Dissertation Chair, the student will complete all sections of the Recommendation of Dissertation Committee Form. The form and all requirements should be submitted to the IH PhD Program Director, who will review and sign, so the student can then forward the Dissertation Committee recommendation to the Graduate College for approval and formal appointment.

CHAPTER 3: COMPREHENSIVE EXAMINATION

Each student must successfully complete a written comprehensive examination. This examination is separate from, but related to, the student's coursework requirements. The purpose of the comprehensive examinations is for the PhD student to demonstrate that she/he has the ability to identify, undertake, and analyze a specific substantive area (or areas) of interdisciplinary health research that would be appropriate for a dissertation topic. The comprehensive exam tests the student's comprehensive knowledge of the field of study, both in breadth across the general topic, and depth within the area of specialization. The examination serves as the primary checkpoint for the Dissertation Committee to rigorously assess the student's preparedness to progress toward candidacy.

The specific goals of the comprehensive exam are for the PhD student to demonstrate the capacity to:

- 1. develop a firm knowledge related to health in general and specific to a relevant specialization area;
- 2. integrate information from the specialization area to identify a health issue;
- 3. design an appropriate methodological approach to define, evaluate, and analyze a health issue; and
- 4. discuss the potential contribution of the proposed research study to the body of knowledge of health theory and implications for research, policy and/or practice.

Thus, the overall goal of the comprehensive examination is to ensure that every PhD student has rigorously demonstrated competence in a breadth and depth of subjects related to their focus area in interdisciplinary health. In addition, students must demonstrate written communication in English at a level that will allow them to effectively communicate their ideas and knowledge to a wide range of audiences.

Overview

The written examination will be open-book, take-home, completed over 14 days, and include 20-25 pages. The examination topic(s) must be current and may be drawn from diverse substantive and methodological areas of interdisciplinary health, addressing unanswered and rigorous questions. The doctoral student will submit topics/questions to the Dissertation Chair (Co-Chair, if applicable) and Committee for consideration. Topics/questions are first submitted to the student's Dissertation Chair, who has the responsibility for final construction of the comprehensive examination. The Dissertation Chair will also invite each member of the student's Dissertation Committee to contribute items to a pool of topics or questions for each section of the comprehensive examination. Typically, synthesis of the pertinent research literature will be paramount to a successful response. Additionally, students may be required to identify and discuss aspects of interdisciplinary health, including but not limited to research on disability, health equity, and psychosocial health; effective interventions and systems of care or supportive services across the life cycle and spectrum of health and disabilities; and relevant theories or paradigms with application of their knowledge to a broader field. Students may also be required to make recommendations for advancing the field.

Schedule of the Comprehensive Examination

The timing of the comprehensive exam will be determined by the student and Dissertation Chair in consultation with the Dissertation Committee. Typically, students will complete the comprehensive exam only after completing all required coursework for the PhD, either at the end of their second year or the middle of their third year (for full-time students). However, in some cases, the student, a student's Dissertation Chair/Committee or the IHSC may determine that additional coursework is needed following the comprehensive exam. The comprehensive exam should be taken no less than six months before the dissertation defense. The student must notify the Dissertation Chair of the intention to take the examination at least six weeks prior to the scheduled examination start date. The purpose of the notification is to allow adequate time to solicit questions from members of the Dissertation Committee.

All doctoral students planning to take the comprehensive examination will send an email to the Dissertation Chair and IH PhD Program Director with the start date of the examination along with an updated Plan of Study form, at least four weeks prior to the exam. Students must confirm the exact deadline with the IH PhD Program Director. The IH PhD Program Director will check the student's grade point average and verify that there are no outstanding requirements. Students and Dissertation Chairs will be notified of approval to proceed with the comprehensive examination.

Format of the Comprehensive Examination

Prior to the comprehensive exam, each student, working with the Dissertation Chair, will outline the intended topics and potential questions for the examination. Students are advised to carefully choose appropriate research questions that focus on interdisciplinary health and that incorporate their area of specialty and dissertation topic. It is important that the student demonstrates their ability to identify problems and think about them critically.

The Dissertation Chair, in consultation with the other members of the Dissertation Committee will draft and agree upon 3-5 sections (each section comprising one or more questions) on which the student will write for the exam.

A student's Dissertation Chair and Committee will determine the specific expectations for the comprehensive examination, although certain parameters must be met, as follows:

- Each student will have 2 weeks to complete the exam from the time topics are finalized and provided to the student. Students who wish to complete the exam in less than 2 weeks may turn the exam in early.
- Each student must address the Dissertation Chair's and Committee's questions in the exam, totaling 20-25 pages double-spaced in Times New Roman 12 pt font or Arial 11 pt font. The student may not go over 25 pages. *This page limit does not include references*. AMA or APA must be used for referencing.
- During the exam period, students may request clarification of the topics or questions to be addressed from the Dissertation Chair, but the Dissertation Chair or Committee will not review drafts of the exam before submission.
- During the examination period, students should not consult other faculty (non-Committee members), about the examination or to read drafts.

• Once the examination is complete, the Dissertation Chair and Committee will be given three weeks to review the examination. The student will receive written feedback from the Dissertation Chair and Committee, denoting strengths and weaknesses of the exam, and providing an evaluative assessment for the examination (i.e., pass, revise, or fail; see table below). For a complete guide to grading, see the Evaluation and Grading section below.

Content of the Comprehensive Examination

The content of the comprehensive examination will be drawn from three areas:

- 1. Specific knowledge of the state of the literature regarding the student's focus area(s).
 - a. Evaluation will be based upon a student's ability to obtain research materials, synthesize the literature, identify knowledge gaps, and discuss the potential to make contributions to the focus area.
- 2. <u>Discussion of relevant theories for pursuing the area of interest and assessment of the</u> contribution the study will make to theory and interdisciplinary health practice.
 - a. Evaluation will be based upon: the student's review of a broad range of theories that are derived from multiple disciplines and relate to the student's focus area;
 - b. The student's evaluation of the strengths and weaknesses of each reviewed theory as it relates to the student's focus area; and
 - c. The justification made for using one or more theories to study their area of interest.
- 3. Research methods and evaluation, including design and/or methodological competence, particularly related to the student's specific research interests.
 - a. Evaluation will be based upon the student's review of multiple methods for researching the focus area, discussion of strengths and weaknesses of each method, and conclusion about which method(s) are best suited to studying the area of interest.

Skills that the student must demonstrate in the examination:

- 1. Conceptual
 - a. Select a research question to be developed into a proposal.
 - b. Review the literature and provide an interdisciplinary health perspective of the problem.
 - c. Provide a rationale for choice of specific research hypothesis or hypotheses.
- 2. Problem Solving
 - a. Propose an appropriate and feasible study design for the research question.
 - b. Outline an analysis plan suitable to the study design being proposed and sufficiently detailed to permit a judgment on its methodological adequacy.
 - c. Clarify any other methods pertinent to your selected design.
 - d. Address any issues related to feasibility and ethics of your proposed design.
 - e. Discuss hypothetical outcomes, limitations, their interpretation and interdisciplinary health significance.
- 3. Writing skills will be considered among the evaluation criteria.

Evaluation and Grading of the Comprehensive Examination

All Dissertation Committee members (including the Chair) must evaluate the student's original examination products and vote on whether to pass, fail, or revise. If the decision is to revise, the student will have only one opportunity to produce written products that meet the expectations for a doctoral program.

- A score of *Pass* will reflect competent and sound work for a doctoral student. Work at this level shows signs of creativity, is thorough and well-reasoned, and demonstrates clear recognition and good understanding of the salient issues.
 - In rare instances, students whose performance is truly exceptional may be awarded a grade of "Pass with Distinction." Work at this level is creative, thorough, well-reasoned, insightful, well written, and shows clear recognition and an incisive understanding of the salient issues. Work at this level is of outstanding professional quality and requires a unanimous vote of the Doctoral Committee.
- A score of *Revise* will reflect work that is promising, but requires additional information for a pass. For a revise score, the comprehensive examination should demonstrate a clear recognition and good understanding of the salient issues, but may require more work on the reasoning, scientific rationale, or written communication. Students will be given two weeks to revise the submitted comprehensive examination, and all members of the Dissertation Committee will be given three weeks to ensure all required revisions have been addressed.
- A score of *Fail* signifies unacceptable work for a doctoral student; work at this level demonstrates neither a conceptual grasp of salient issues nor an aptitude for scholarly work. Each student will be given one opportunity to successfully complete a new examination.

Notification of the Comprehensive Examination Results

The Dissertation Chair will provide the student with written feedback denoting strengths and weaknesses of the exam, and providing an evaluative assessment for the examination (i.e., pass, revise, or fail). The IH PhD Program Director and other Dissertation Committee members will receive copies of the written feedback. The Dissertation Chair will inform the student of the outcome of the examination within three weeks. Results of the examination (email from Dissertation Chair) will be submitted to the Graduate College with the <u>Candidacy Application for the Doctoral Degree Form</u> when the student is ready to apply for candidacy.

CHAPTER 4: DISSERTATION RESEARCH PROSPECTUS

PhD students are expected to be self-motivated and largely self-directed with their own research program in interdisciplinary health with advice and counsel from the Dissertation Chair and Committee. The PhD is a research degree that should be evaluated based on originality and quality of the research.

Dissertation Prospectus

All students in the IH PhD program must prepare a written prospectus for their dissertation research. The prospectus should be completed, at the soonest, the term following the comprehensive examination.

The student must prepare a written prospectus that outlines the general research area and identifies the research questions to be answered in their research. The research design, methods, and analytic plan must be included. The prospectus is generally 10-20 pages in length and must be approved by the Dissertation Committee. A copy is sent to the IH PhD Program Director, and a copy is included as part of the Candidacy Application for the Doctoral Degree.

The following are general page recommendations; these may vary by discipline and committee.

Title / Signature Page (1 page)

- Title of work
- Student name
- Names of Committee Members
- Date
- Once the prospectus is defended and approved, this page will be signed by all committee members.

Abstract (1/2 page)

- Approximately 250-300 words
- Succinct description of your proposed project, including methods, theoretical foundation, outcomes, and significance

Introduction (1-3 pages)

- A clearly written description of the focus of research
- Define your hypothesis, question, or exploratory focus area
- Describe the significance of the project

Background (2-3 pages)

- Describe the setting for your research
- Conduct a literature review
- What are the historical precedents for the research?
- What are new developments in the research area?

Theory (2-3 pages)

- What is(are) the theoretical foundation(s) used in the research?
- Historical precedents?
- New developments?
- How does theory articulate with and inform the research?

Methods and Analysis (3-5 pages)

- Describe the overall research design including a sampling strategy and a description of each method
- Include an analysis plan that connects directly to the methods
- How will the methods and analysis begin to answer the research question(s)?
- How do methods articulate with theory?

Timeline (1/2 page)

• Create a timeline for the completion of data collection and analysis including a specific timeline with dates the research will begin and end including milestones in between

Ethical Considerations (1/2 page)

- Discuss any ethical considerations cite studies here!
- Communicate the status of IRB approval if applicable

References Cited (no page limit)

- No citations here that are not in text
- This should be more than 1 page

In addition to the written prospectus, the students will also complete an oral prospectus defense/examination. All Dissertation Committee members must attend the oral prospectus defense/examination, barring any extenuating circumstances, which must be approved by the Dissertation Chair.

The purpose of the oral prospectus defense/examination is twofold: 1) a written prospectus defense presentation, and 2) questions from the Dissertation Committee on the student's written products; this may include the written prospectus, as well as the comprehensive examination. The written prospectus defense presentation is designed to provide students with the opportunity to present their plans for research, and if appropriate, refine the methods, and gather further information and suggestions. Following the oral prospectus defense/examination, the Dissertation Committee members convene to make final determination of the appropriateness of the research being proposed and to deliberate recommendations for changes in the prospectus. The oral prospectus defense/examination is scheduled by common agreement of the student and the Dissertation Committee members. Prospectus defenses are scheduled during the regular fall or spring semesters. Prospectus defenses may be scheduled during the summer only if all committee members agree. Semester dates are posted on the Academic Calendar located on the Office of the Registrar's web page.

Generally, the oral prospectus defense/examination lasts approximately 2 hours. The first 45-60 minutes comprise a presentation by the student of the written dissertation prospectus. This is open to the public with questions allowed from the public. The student and Dissertation Committee with

then have the examination with questions from the Dissertation Committee. At the end of the oral prospectus defense/examination, the student will be asked to leave the room so that the members of the Dissertation Committee can discuss the student's performance. Ideally, the Dissertation Chair will inform the student as to the Dissertation Committee's decision within one hour of the examination's completion. Students either pass or fail the oral prospectus defense/examination. A vote of 2/3 of the Dissertation Committee is required to pass the student. If passed, this qualifies the student to apply for candidacy if all other <u>candidacy requirements</u> have been successfully completed.

If a student fails, they may be placed on academic probation. The Dissertation Chair will provide the student reasons for the decision, as well as an academic plan to help the student prepare for the student's retake. A student failing the oral prospectus defense/examination may retake the examination within 60 days. If a student fails the oral prospectus defense/examination a second time, they may be recommended for dismissal from the PhD program. The student may apply for readmission after one year (two semesters). Readmission will be subject to the same requirements as specified for those students applying to the program. Results of the examination (email from Dissertation Chair) will be submitted to the Graduate College on the Candidacy Application for the Doctoral Degree when the student is ready to apply for candidacy.

CHAPTER 5: ADVANCEMENT TO CANDIDACY

Advancing to Candidacy Procedures

A student must apply for candidacy with the <u>Candidacy Application for the Doctoral Degree Form</u>. The Dissertation Chair (and Co-Chair, if applicable), the IH PhD Program Director, and the Graduate College approve the Candidacy Application. Admission to candidacy must be granted at least 90 days before the Dissertation Defense Examination. The <u>Application for Candidacy for Doctoral Degrees Form</u> includes several requirements.

Please see Requirements for the Doctoral Degree, PhD for Graduate College criteria and standards for the PhD, including candidacy. To meet the requirement for candidacy, the PhD student must successfully provide evidence of completion of all courses on the Program of Study, research competency requirements, comprehensive written exam, and dissertation prospectus written and oral prospectus defense/examinations administered by students' Dissertation Committee.

Research Competency Requirement

NAU policy for PhD programs includes a "research competency requirement" that must be satisfied before a student can be admitted to candidacy. In the IH PhD Program, this competency is demonstrated through successful completion of IH 601 (3 credits), IH 685 (6 credits), and the analytic skills courses (9 credits). This totals 18 credits.

CHAPTER 6: DISSERTATION RESEARCH

Post-Candidacy (Dissertation Research)

The Dissertation Chair, in concert with the IHSC, monitors student's advancement to ensure satisfactory progress is being made. The successful completion of written prospectus and oral prospectus defense/examination, and approved <u>Candidacy Application for the Doctoral Degree Form</u> signifies that the student has permission to proceed with dissertation research.

A minimum of 15 dissertation credits (IH 799) are required to meet the degree requirements. However, students will likely take more than 15 units of IH 799 due to, but not limited to: the nature of the research, the writing process, or Continuous Enrollment requirements. Even if the student does not exceed 15 units of IH 799, s/he must maintain continuous enrollment in 799 until graduation per the Continuous Enrollment policy.

Dissertation requirements are outlined in <u>Requirements for Theses and Dissertations</u> and the Graduate College website <u>Thesis and Dissertation</u>. The student is expected to conform to the style of presentation currently accepted by the Graduate College in preparing all drafts of a dissertation. Students are required to follow the <u>Formatting Guidelines</u> and to submit their dissertation for a format check (ETD@nau.edu) at least 10 business days prior to the defense (including your 7 digit NAU ID).

Acceptable Formats

Two types of dissertation formats are acceptable. The first, the **traditional format**, has at least five chapters, including an introduction, review of the literature, methods, and conclusion. At least one additional chapter comprises results, discussion, and recommendations. The second option is the **manuscript (or journal) format, which** includes at least three manuscripts, as well as a chapter with an overall introduction and a chapter with overall discussion and recommendations. The manuscript option also requires the student's Dissertation Committee to approve the refereed journals that will be the initial targets for submission. The student and Dissertation Committee must agree upon the choice of a specific format during the time of the written and oral prospectus. Dissertations in manuscript format should have all of the same basic components that occur in a traditional dissertation. Dissertation format must align with Graduate College guidelines and also be approved by the Dissertation Committee before scheduling the defense.

Below are guidelines for completing the dissertation.

- 1. The first draft of the dissertation must be reviewed by the Dissertation Chair, revised by the student, and approved again by the Dissertation Chair prior to distribution to the Dissertation Committee. This initial review should be made well in advance of the dissertation defense examination and often requires several cycles (minimum of eight weeks).
- 2. The revised dissertation should be submitted to the Dissertation Committee at least four weeks prior to dissertation defense examination. Dissertation Committee members must

provide feedback on the dissertation within one month if their changes are to be incorporated into the final draft of the dissertation. The Dissertation Chair has responsibility to ensure recommendations of the Dissertation Committee are incorporated into the revised dissertation.

- 3. The dissertation in final draft form, including all figures, tables, and references, must be provided to the Graduate College (ETD@nau.edu) at least 10 business days before the date of the dissertation defense exam.
- 4. NAU dissertation formatting and submission is electronic. Refer to the Graduate College's Thesis and Dissertation website for specific information on deadlines, formatting guidelines, and electronic dissertation guidelines. The Thesis and Dissertation Processes and Deadlines details the steps and should be followed for guidance.
- 5. Each student should submit an electronic copy of the final approved dissertation to the IH program by emailing it to the IH PhD Program Director and upload to ProQuest. If the final dissertation document is too large to send as an email attachment, the student should contact the IH PhD Program Director. The dissertation must be uploaded to ProQuest by the end-of-term deadline for students to graduate that semester. This deadline is <u>not</u> flexible for any reason; students who upload their dissertation to ProQuest *after* 11:59 pm on the day of the end-of-term deadline will not be approved for a conferral date for that semester and will have to postpone their graduation to the following term.

CHAPTER 7: DISSERTATION DEFENSE and DEFENSE SEMINAR

An official defense of the dissertation is required for all PhD candidates. The dissertation defense shall be held within four years of the comprehensive exam. If this time is longer than four years, the comprehensive exam must be repeated. The dissertation defense must occur no sooner than 90 days following admission to candidacy. The defense should be scheduled and held a minimum of four weeks prior to expected date of graduation, and must be held at least 2 weeks before the end of the Fall and Spring semester; Summer defenses require permission of the Dean of the Graduate College. The student must submit the completed and signed Dissertation Defense Scheduling Form to the Graduate College (ETD@nau.edu) to schedule the defense. The official defense is restricted to faculty and, at the minimum, must include the entire Dissertation Committee and a University Graduate Committee (UGC) representative, appointed by the Graduate College. The UGC representative reports to the Graduate College on the conduct of the exam and may ask questions but does not vote. Only Dissertation Committee members can vote on the student's performance in the defense. The maximum time for the dissertation defense (following the seminar) is two hours.

Before the dissertation defense, the PhD candidate will deliver a dissertation defense seminar that is open to the public. Ideally, this is scheduled on the same day as the official dissertation defense. Questions from the audience (e.g., faculty not on the Dissertation Committee, students, other public members) are allowed during the seminar.

All Dissertation Committee members should be provided a copy of the dissertation for review at least four weeks prior to the defense. The dissertation must be in final form prior to the defense. It is the Dissertation Chair's responsibility to determine when the dissertation is ready to be defended. However, the Dissertation Committee can delay the defense if the dissertation is judged to be inadequate. By signing the <u>Dissertation Defense Scheduling Form</u>, the committee chair and each committee member attests that it is ready for a defense.

The Dissertation Chair and UGC representative holds the responsibility to ensure that the defense is conducted in a fair and appropriate manner. Questions will be asked by each member of the Dissertation Committee. Questions will be limited to the dissertation or knowledge related to the dissertation. Defense questions should be designed to allow the student to demonstrate ability in interpreting the results of the dissertation research and in discussing the results in relation to current scientific understanding.

Following the defense, the student will be asked to leave the room, while the Dissertation Chair leads a discussion of the examination. The IH Program follows the NAU Graduate College policies regarding how a "pass" is determined. If a student fails their first defense, they will be placed on academic probation and given another opportunity to defend. The second defense must be scheduled within six months of the first defense. If the student fails the second defense, they may be recommended for dismissal from the PhD program. Students will be notified immediately as to the outcome of the defense.

The UGC representative or Dissertation Chair downloads, completes, and saves the Thesis/Dissertation Oral Defense Form – Part 1, on which the vote is recorded and which the Dissertation Committee members sign. This completed and signed form is due to the Graduate College within 48 hours of the defense. Part II will be submitted by the Dissertation Chair once

final revisions are complete and the committee has approved the final copy for upload into ProQuest. The Dissertation Chair must complete and sign the Oral Exam Part II Form and submit it to the Graduate College by the end-of-term deadline. The student must upload the dissertation to ProQuest by the end-of-term deadline for the student to graduate that semester. This deadline is not flexible for any reason; students who upload their dissertation to ProQuest after 11:59pm on the day of the end-of-term deadline will not be approved for a conferral date for that semester and will have to postpone their graduation to the following term. Students should follow all deadlines outlined on the Graduate College webpage.

CHAPTER 8: APPLICATION FOR GRADUATION

All graduate students in the PhD program must make a formal application for graduation. A student should apply for graduation by the <u>deadlines</u> determined by the Graduate College and the Registrar. Full instructions on Forms and information are available on the Graduate College website for <u>Graduation</u>. The application process includes payment of a graduation application fee. In approving the application, the Dissertation Chair asserts that the graduate student is making sufficient progress to be able to complete and defend the professional paper, thesis, or dissertation prior to the end of the semester.

CHAPTER 9: FINANCIAL ASSISTANCE

There are several broad categories of financial support available to students in the IH PhD program. For all kinds of support, formal offers of assistance are made only after the student is admitted into the graduate program

1. The first, and most common, is a **graduate research assistantship** awarded on the basis of the academic merit and ability to conduct research in collaboration with a faculty member.

Graduate research assistantships for students in the IH PhD program are primarily available from NAU or extramural research grants. In both cases, assistantships are awarded to individual faculty members who are responsible for selecting students. Criteria for selecting a student for an assistantship may vary among faculty members, but must include a high likelihood of excellent academic performance and ability to perform the job assignments. Inquiries about the availability of assistantships should be made to the IH PhD Program Director and to the faculty doing research in the area in which the student is interested.

2. The second, a graduate **teaching assistantship**, is occasionally available depending on funding and teaching needs of units within CHHS/SBS.

All full-time graduate research and teaching assistantships include a commitment of 20 work hours per week and part-time assistantships include a commitment of 10 work hours per week. Both require a minimum course load of 9 units per semester. All graduate assistants are required to pay university and course fees. In addition, assistantships may occasionally be awarded at less than the half-time rate depending on the needs of a research project and the availability of funds. Graduate students who receive full-time assistantships are not permitted to have employment outside the IH program.

All internal forms of graduate funding through assistantships are typically limited to four years. However, assistantships are awarded on a year-to-year basis and should not be assumed to renew automatically. Only students who make good progress each year of their program will be considered for continued support; this is also dependent on the continued availability of funds. There is no limit on the total number of years of support for PhD assistantships funded by extramural grants. The duration of support for assistantships funded by extramural grants will depend on the student's performance and the availability of funds. In addition, the supervising faculty may withdraw assistantship at any other time that a student's overall performance is judged inadequate following failure to improve performance after a performance evaluation and if the student falls below what is considered good academic standing.

- 3. The third is a **service or non-academic graduate assistantship**. These are available for university-wide offices.
- 4. The fourth is a tuition waiver, which is offered on the basis of academic merit and financial need. There are a variable number of in-state and/or out-of-state tuition waivers; students will still be responsible for university and course fees.

The Graduate College's website <u>Graduate Assistantships & Tuition Waivers</u> has specific details for Graduate Assistantships and Tuition Waivers. The <u>Graduate Assistantship, Traineeship, & Fellowship Policy Handbook</u> contains policies relating to graduate assistantships and fellowships/traineeships at NAU and explains the employment rights and responsibilities of graduate assistants. The handbook also has information and policies that apply to graduate students, graduate assistants and fellows.

- 5. The fifth category is a student worker, where students can be hired at an hourly wage at the Department or College (CHHS or SBS) level. This form of support does not come with any tuition remission or health insurance.
- 6. The sixth category of support is a **fellowship provided by governmental agencies or other sources**.
- 7. The seventh category is based on **demonstrated financial need**. Financial assistance based on financial need is administered by the <u>NAU Office of Scholarships and Financial Aid</u>, (Gammage Building 1; P.O. Box 4108, Flagstaff, AZ 86011-4108; 928-523-4951)..

CHAPTER 10: GRADUATE ASSISTANT EXPECTATIONS

Graduate Research Assistants are expected to demonstrate qualities of professionalism and academic leadership beyond those normally expected of other graduate students. A Graduate Research Assistant is expected to remain in Good Academic Standing and make satisfactory progress toward a graduate degree. The Graduate Assistantship, Traineeship, Ellowship Policy Handbook details all policies and procedures for Graduate Assistants.

GRA Expectations in the IH program include:

- 1. A minimum cumulative GPA of 3.00.
- 2. No more than six credits of "C" grades in non-core courses.
- 3. A grade of "B" or better in the twelve credits of core courses.
- 4. Completion of at least nine credits each academic semester.

In addition, all Graduate Assistants must attend in their first semester of employment: a) the <u>Orientation for New Graduate Students</u>. This orientation is designed to familiarize Graduate Assistants with the goals of the University and the Graduate Assistant's role in achieving these goals. b) required new employee training; it is mandatory that all graduate assistants complete the required new employee <u>Training</u>.

In addition to the above university-wide expectations for Graduate Assistants, the IH PhD program has established the following conditions of support for Graduate Research Assistants:

- 1. The Faculty Research Supervisor determines the Graduate Research Assistant's work schedule. Requests for assistance from a graduate student should always be routed through the Faculty Supervisor. [5]
- 2. Graduate Research Assistants are expected to work an average of 20 hours/week (full-time appointment).
- 3. Students who receive research assistantships provided to faculty members through extramural grants are typically employed to perform research or other work specified in the grant. This may involve assisting the faculty member with data collection, data analysis, and writing reports so that the faculty member can meet their obligations to the granting agency. In many cases, the work done by the student *may be* an important component of their thesis or dissertation research. However, the student's use of such data for his or her research must be approved by the faculty member responsible for the research. Further, such use of data does not relieve the student of the obligation to provide data, reports, or other products to the faculty member responsible for the research. Faculty members and their students supported by externally funded assistantships should agree to the student's responsibility to the project and the use of project data before initiation of any work by the student.

- 4. Graduate Research Assistants working at the full-time level (20 hours per week) are not permitted to have employment outside of responsibilities associated with the IH PhD program.
- 5. Graduate Research Assistants are expected to be self-motivated and work with minimal supervision from the Faculty Research Supervisor.
- 6. At the discretion of the Faculty Research Supervisor, Graduate Research Assistants may be required to help on other graduate student and faculty projects.
- 7. Graduate Research Assistants may occasionally be asked to assist on field trips or in laboratory exercises and present appropriate lectures in their field of study as requested by the Faculty Research Supervisor.
- 8. After completion of all required coursework except dissertation, a resident doctoral graduate student on half-time assistantship may petition to register for six credit hours a semester. Such a petition should be approved by the Graduate College and be endorsed by the Dissertation Chair and the IHSC. There may be Financial Aid implications with student loans, which the students should clarify.
- 9. The student's Faculty Research Supervisor will determine whether the student has satisfied the above conditions.
- 10. Written evaluation by the Faculty Research Supervisor of the performance of each Graduate Assistant is required for each fall and spring semester using the Graduate Assistant Evaluation Form

CHAPTER 11: STUDENT RESPONSIBILITY

A graduate student occupies a special place in the IH PhD program. Graduate students are in many ways closer to the faculty than to undergraduate students. Thus, high expectations exist for responsibility, honesty, and professional behavior at all times. These qualities are developed and observed through interactions with faculty, other graduate students, and visiting scientists; dissertation research; participation in seminars; and attendance and presentation of papers at scientific meetings. Evaluation concerning a student's professional competence and ability to interact with people is based on the student's participation in these diverse activities.

Graduate students are expected to exhibit high professional standards and conduct themselves in a professional manner. Graduate students are also expected to interact with faculty and visiting scientists through seminars, presentations, and informal events.

Graduate students are encouraged to join and participate in the activities of appropriate professional societies. The benefits of membership, including journals and newsletters, are generally available to students at reduced rates.

Ethical Research Conduct

Graduate research should entail the generation of original, truthful information. NAU graduate students must complete the NAU human subjects component of the Collaborative Institutional Training Initiative (CITI) online training program. The IRB CITI training certification is valid for a four-year period, after which time refresher training must be completed. It is recommended that a copy of the completion certificate is printed and maintained. If CITI training was completed prior to 2019, training is valid for a three-year period. Courses that qualify for the IRB requirement include the Health & Human Services or the Social & Behavioral Research modules. The training will be determined appropriate for their area of specialization and must occur by the end of the first semester of their program.

Academic misconduct, as defined by NAU, includes any of the following deceptive practices:

- 1. Falsification of data: the intentional and unauthorized altering or inventing of any information or citation, including the purposeful omission of conflicting data with the intent to falsify.
- 2. Plagiarism: knowingly representing the works or ideas of another as one's own.
- 3. Misappropriation of others ideas or data.
- 4. Misrepresentation of academic credentials.

Allegations of academic integrity violations follow the procedures identified by the university on Academic Affairs: <u>Academic integrity</u> webpage. <u>Academic integrity procedures</u> at NAU will be followed; however, the student's Faculty Advisor and IH PhD Program Director will co-carry out responsibilities similar to the Department Chair for issues related to academic misconduct.

CHAPTER 12: OFFICE SPACE

Office space will be provided to all graduate students, if possible. If space is limited, first priority is given to graduate students based on seniority.

Full-time research associates, technicians, or post-doctoral researchers may be placed in the graduate student areas if space is not available elsewhere. Once assigned a desk, the student is expected to utilize it to the fullest. Space is a scarce resource. Infrequently used desks will be assigned to another student.

Appropriate keys are issued to students by the supervising faculty member. Security demands that students safeguard keys issued to them and not lend them to others. It is illegal to duplicate university keys. Also, students should be very conscious about locking doors when they enter the building or laboratories outside of general business hours.

General office space for IH PhD students is available in SBS West room 100I for graduate assistants and SBS West room 001 for all students. Room 100I is a workspace with desks and room 001 is a lounge. Keys for these spaces must be checked out from staff in SBS. Students are expected to self regulate in these spaces in terms of sharing desk space, maintain tidiness and respecting noise levels appropriate for an office environment.

CHAPTER 13: SAMPLE STUDENT PROGRESSION PLAN

This is a sample only, and plans should be individualized to meet the needs of each PhD student. This sample is based on a full-time status, and part-time students should adjust accordingly.

Semester 1

Students must meet with Faculty Advisor or IH PhD Program Director prior to the first semester to select courses based on the <u>Program of Study</u> and set goals for the first semester.

Two required core courses: IH 601, IH 701

IH 685: 1 credit required with IH PhD Program Director

Semester 2

One required core course IH 702

Students should work with their Faculty advisor and IH PhD Program Director to develop a provisional Program of Study.

Semester 3

One required core course IH 602

Identify Dissertation Chair. May begin to formalize Dissertation Committee under supervision of Dissertation Chair. The student must be prepared to discuss his/her research objectives, as well as career goals. The student should share the Program of Study with his/her Dissertation Committee members. When the committee is established, forward the signed Recommendation of Dissertation Committee form with other required information to the IH PhD Program Director for final approval.

Semester 4

Coursework

Pre-candidacy research

Semester 5

Finish up coursework

Written comprehensive exam

If the comprehensive exam is unlikely to be completed by the end of the sixth semester following admission to the program, students must submit in writing, along with their provisional Program of Study, an explanation for the longer timeline.

Semester 6

Dissertation written prospectus and oral defense/examination Admission to candidacy

Semester 7 and beyond

Dissertation research