

# **Doctoral Program Handbook**

## **Department of Health Behavior and Health Education**

### **The University of Michigan School of Public Health**

**2009 Edition**



August 31, 2009

## OVERVIEW

Welcome to the doctoral program in the Department of Health Behavior and Health Education (HBHE) at the University of Michigan School of Public Health! This document provides students and their faculty advisors with information about the program. In addition, students should review and adhere to the Rackham Graduate School Academic Policies. To access a copy, please visit:

<http://www.rackham.umich.edu/policies/gsh/>

Social and behavioral factors play a significant role in the etiology and course of today's pressing health problems. The doctoral program in HBHE prepares professionals for research, teaching, service, and leadership positions with the overall objective of improving the health of populations. To meet this objective, all students in the program are trained to conduct independent research. The primary focus is on applied research that informs the development of interventions and policies to promote health at the individual, community, population, societal, and/or global levels.

The course requirements of the doctoral program prepare students to take their preliminary examination at the end of their second year. The successful student will arrive at candidacy status with the ability to creatively and rigorously apply theory, knowledge, and methods to real-world public health problems. These skills will guide the completion of the dissertation.

## LEARNING OBJECTIVES

The doctoral program focuses on the following *learning objectives*:

- A. Develop scientific literacy. This includes a critical understanding of the scientific method, quantitative and qualitative research methods, and the ability to critically evaluate scientific literature.**

Through coursework, research experience, and independent study, HBHE doctoral students should develop the ability to critique and synthesize relevant literature from across disciplines, both theoretical and empirical.

With respect to theory, students should acquire broad knowledge in the social and behavioral sciences, apply higher order theoretical perspectives to real world problems, and extend and elaborate theories in new directions.

With respect to methodological and data analytic skills, doctoral candidates should be able to read critically across a span of varied methodologies, have knowledge of quantitative and qualitative methods, discern which methods best apply to a given set of research problems, and be able to adapt existing measures to new contexts or develop new measures appropriate to the research context. Most importantly, students should be able to connect substance, theory, methods, and measurement toward the appropriate application and full explication of selected methods to study specific research questions, and the ability to operationalize them in a research setting.

**B. Understand the history of theoretical knowledge in health behavior and education, and in public health and social sciences more broadly. Understand how these historical developments reflect broader changes in political and cultural values, and scientific ethics.**

Through coursework and independent study, all students should gain an appreciation of the roots of what we do today, how the field has evolved, how the field has expanded, and where it is going next. In particular, they should come to appreciate how the content and scope of theories have evolved to include individual behavior, community context, and socio-structural conditions.

Whatever substantive area, population, or research approach a student focuses on in the dissertation, all students should reach candidacy schooled in theories and methods of individual behavior change, community based participatory research, the social patterning of health problems, and the social structural influences, opportunities, and constraints affecting individual and social behavior.

Through coursework, gaining certification in the Program for Education and Evaluation in Responsible Research and Scholarship (PEERRS), independent study and attendance at appropriate presentations, students should gain an appreciation of the importance of academic freedom, responsible research and scholarship, scientific ethics, and human subjects review.

- C. Demonstrate the ability to synthesize and apply scientific knowledge in new ways to the development of new conceptual models and/or research hypotheses. To justify the new question(s) with reference to the existing literature, to select appropriate methodologies for their examination, and indicate potential contributions of the proposed research.**

In their preliminary examination, dissertation prospectus, and dissertation research, students must be able to defend their own conceptual models and connect methods, measurement, and interpretation to these models.

All doctoral students prepare a literature review that evaluates and integrates the public health and social science literatures. In their reviews, students should cover theoretical *and* empirical work. Doctoral-level literature reviews are not anthologies; listings of previous research; or encyclopedia entries. Instead, they should demonstrate that relevant literature has been read with a critical eye and connections made in ways that uncover missing pieces in the literature or yield new syntheses. The reviews should reveal mastery of the state of the literature in an area, including distinguishing established relationships from hypotheses and speculations, and discerning the implicit and explicit theories and assumptions on which articles rest. Students should demonstrate their ability to “see the forest from the trees”, i.e., to discern what findings in the field have been more significant than others, and where future complications lie. Literature reviews should naturally lead to the development of research agendas for filling in gaps, asking new questions, extending theories or constructs, and building on scientific findings. The doctoral-level literature review should be innovative, and serve as a prefacing mechanism for future work, identifying and justifying a new research question(s), and hypotheses. The literature review should be of sufficient scope to lay the foundation not only for the dissertation, but also for the student’s emerging and more long-term research agenda.

The review should indicate the potential scientific contributions of the proposed work, indicating how the new knowledge would enhance or reinterpret previous knowledge; inform new interventions or policies; and promote health through social or behavioral change.

- D. Acquire professional skills in the production of their own ideas. To develop skills in scientific writing, oral communication, grant-writing, teaching, and scientific service.**

Doctoral students should develop skills in collegial exchange, including reviewing the work of others in a constructive manner in group and written contexts. In addition, all students should develop academic leadership skills, writing and editing skills, and presentation and publication skills. Doctoral students should learn about the proposal and grant writing processes and build related skills in scientific review, research ethics, and the development and management of budgets. Doctoral students must become certified in appropriate PEERRS modules which include at a minimum: Foundations of Research Responsibility, Research Administration, Conflict of Interest, and Human Subject Protection. Doctoral students should learn the fundamentals of curriculum development, and develop teaching and mentoring skills. Finally, students in the program should develop job seeking and interviewing skills.

### **ADMINISTRATION OF THE HBHE DOCTORAL PROGRAM**

Primary responsibility for the program resides with two HBHE faculty committees -- Doctoral Admissions and Funding and Doctoral Curriculum. The Admissions and Funding Committee administers admission procedures, recommends a faculty advisor for each incoming student, and is responsible for issues related to funding for incoming students. The Doctoral Curriculum Committee evaluates curricular issues, sets criteria for the required program of study, oversees the annual evaluation of doctoral students, appoints ad hoc committees for the evaluation of preliminary examinations, serves as an official liaison with the School of Graduate Studies, certifies candidacy, recommends dissertation committees to the Horace H. Rackham School of Graduate Studies, and is responsible for issues related to funding for current students. Two doctoral students serve on the HBHE Doctoral Curriculum Committee each year.

Students are expected to discuss their program and related issues with their faculty advisors and turn to them first with questions or requests. After consulting with their advisors, students may address concerns to the faculty Chair of the appropriate Doctoral Committee, as needed, either for further clarification, assistance, or approval.

The HBHE faculty conducts a doctoral student review each spring. The purpose of this review is to help ensure that students are progressing in their program and to familiarize the full faculty with students' strengths, interests, progress, and challenges. This process may help students identify research opportunities, funding, or appropriate

faculty members to serve on their dissertation committees. Students will receive a letter from their faculty advisor based on the results of this review.

## **FUNDING OPPORTUNITIES**

There are a variety of funding opportunities for HBHE doctoral students, including fellowships from the Population Studies Center, the School of Public Health's Center for Ethnicity, Culture, and Health (CRECH), and the Horace H. Rackham School of Graduate Studies. The department also employs a small number of Graduate Student Instructors (GSI), a position that provides funding and teaching experience. In addition to the GSI positions available in the department, HBHE doctoral students have been employed as GSI's by other units on campus, including Women's Studies, Communications, Biology, Psychology, and Sociology.

Although the department works diligently to secure funding for its doctoral students, it is the exception for incoming students to be offered multiple years of funding at the time of admission. However, most doctoral students in the department successfully compete for available funding at the department, School, University, and national levels and complete their programs with a wide array of research and/or teaching experiences.

## **COURSEWORK**

While all students plan a course of study in consultation with their faculty advisor which is unique to their background and future career goals, students are encouraged to view the following as guidelines for progress in completion of degree requirements.

HBHE doctoral students typically enter the program after completing a relevant master's degree, such as a Master of Art (M.A.), Master of Nursing (M.S.N.), or Master of Public Health (M.P.H.) degree. Therefore, course requirements will usually entail one and one-half to two and one-half years of full-time coursework and study, depending on the student's background, desired electives, and success on the preliminary examination. Individual research and dissertation work rounds out the requirements. The Horace H. Rackham School of Graduate Studies, which administers all Ph.D. programs at the University of Michigan, requires a minimum of 36 credit hours of fee payment prior to candidacy, or 68 credit hours overall (including registration for dissertation work). These required hours may be reduced up to 18 credit hours of fee payment and 50 credit hours overall, upon the recommendation of the

Doctoral Curriculum Committee and approval by the Rackham School of Graduate Studies. Students should apply for credit reduction considerations using the Exemption/Substitution form on the HBHE website. This form, along with relevant information requested should be submitted to the Doctoral Curriculum Committee for review. In consultation with the faculty advisor, students should determine which courses from their masters degree program may be eligible for exemption or substitution. This form should be submitted prior to candidacy consideration.

All students are required to complete courses at the Ph.D. level in three categories: core curriculum, cognate, and electives (see below). Coursework selections are made by students in consultation with their faculty advisor.

### *Core Curriculum*

The basic core curriculum of the program consists of four doctoral seminars, a minimum of three additional substantive courses offered by the department, two courses in research methods, two advanced level courses in statistics, and two terms of supervised research experience. Students must also achieve a basic level of proficiency in biostatistics and epidemiology.

### *Doctoral Seminar Requirements*

1. Doctoral students are required to enroll in the professional socialization seminar (HBHE 800) for credit. Most students are required to take HBHE 800 for credit in their first year as an orientation to the doctoral program and to professional development issues.
2. Doctoral students are required to take Health Education Models of Practice and Interventions at the Community Level (HBHE 685), which focuses on conceptually and theory-driven interventions and applications to practice directed at the community level (e.g., development, empowerment, policy, organization, advocacy).
3. The third required doctoral seminar is Theory-Driven Interventions Targeting Individual Behavior Change (HBHE 686), which focuses on conceptually and theory-driven interventions and applications to practice targeting the individual.
4. The doctoral seminar in structural factors in health behavior is the fourth required seminar. This seminar will focus on conceptually and theory-driven interventions and applications to practice focused at the structural level. Students should enroll

in HBHE 810 until this seminar has been finalized with a permanent course number.

*Additional HBHE Courses:*

The HBHE coursework requirement also consists of three substantive courses offered within the department, in addition to any HBHE courses taken to satisfy the research methods requirement. The selection of specific courses to satisfy this requirement should be made in consultation with the student's advisor. Students who enter the program with an M.P.H. in HBHE from the department will have taken at least 18 hours of coursework in meeting the requirement for their Master's degree. Moreover, these courses are likely to have been drawn from the current departmental offerings (or their equivalent). In this case, prior academic work may substitute for some of the required HBHE coursework. A decision on whether any HBHE courses will be waived will be made in consultation with the student's advisor and the Doctoral Curriculum Committee.

*Biostatistics:*

Students typically complete one of the following courses to fulfill the Biostatistics requirement -- Statistics 400, Biostatistics 503, or Biostatistics 553. A grade of B or better is needed in order for the course to fulfill the requirement. If Statistics 400 is selected for this option, the course must have been taken at the University of Michigan within the last five years (also with a grade of B or better). Students who might qualify for an exemption on the basis of prior course work should complete an exemption form, which can be found on the HBHE website. This form will be reviewed by the Doctoral Curriculum Committee and the student's advisor. As part of the petition, the syllabus and text book used in the completed course should be included as supporting documentation.

Exemption from the biostatistics requirement may also be attained by successful completion of the exemption examination. This exam is open book and a calculator is required. Students who successfully complete the entire exam will be exempt from the biostatistics requirement. Students who pass the first portion of the exam but not the problems dealing with multiple regression and analysis of variance will not be entirely exempt, but may select Biostatistics 523 or the Psych 613/614 sequence to fulfill the requirement.

**NOTE:** The biostatistics exemption exam is only offered prior to the first day of classes in the Fall term. Students should check for a current schedule of exams if they intend to take the biostatistics exemption exam.

*Epidemiology:*

Students should enroll in Strategies and Uses of Epidemiology (EPID 503) to fulfill the epidemiology requirement. Depending on a student's background and prior coursework, other options include EPID 600 or EPID 601.

If an HBHE doctoral student has taken an epidemiology course at another institution prior to coming to SPH and received a grade of B or better, the HBHE Doctoral Curriculum Committee can be petitioned to review requests to consider the course as fulfilling the requirement. As part of the petition, the syllabus and text book used in the completed course should be included as supporting documentation.

A student may exempt from the epidemiology requirement by successfully completing the exemption examination, which is based on the EPID 503 course material. To sign up for the examination and to review the EPID 503 coursepack and textbook, contact the Department of Epidemiology's Student Administrative Coordinator.

**NOTE:** The epidemiology exemption exam is offered prior to the first day of classes in both the Fall and Winter terms. Students should check for a current schedule of exams if they intend to take the epidemiology exemption exam.

*Research Methods and Advanced Statistics:*

The program requires a minimum of 6 hours of research methods and 6 hours of advanced statistics above and beyond the basic biostatistics and epidemiology course requirements. This requirement may be satisfied by courses offered outside the department. Students have satisfied these requirements by taking courses offered in HBHE (e.g., Seminar in Behavioral Research Methods, Qualitative Methods and Participatory Action Research), and by the Biostatistics, Psychology and/or Sociology Departments which are offered for graduate level credit (e.g., Applied Data Analysis and Regression Analysis, Applied Multivariate Statistics, Questionnaire Design and Construction, Sampling Design, Event History Analysis, Causal Modeling). No exemptions are made for prior coursework in advanced statistics and research methods.

*Cognate:*

The Horace H. Rackham School of Graduate Studies requires that all students select a cognate area to provide the student with more in-depth training in a specific field of study outside of that offered in the home department. The faculty advisor should guide the student in selecting the cognate area. Students are encouraged to make plans for their cognate areas by the end of their first year.

The HBHE cognate requirement is fulfilled by 9 hours of coursework in the chosen area (usually 3 courses – none of which are in or cross-listed with HBHE). Cognate areas chosen by previous students have included Social Psychology, Women's Studies, Communications, Aging, Population Studies, Public Policy, Native American Studies, and Business Administration.

*Research Experience:*

The intent of the research experience requirement is to enable the student to obtain "hands on" training in one or more ongoing research projects. Students are expected to participate in supervised research for at least two terms (the equivalent of 6 credit hours). This research can be conducted under the direction of a faculty member from either inside or outside the department, and should be arranged in consultation with the student's faculty advisor. Students should register for 3 credit hours of HBHE 900 in the terms in which they fulfill this requirement. If the research experience requirement is to be fulfilled with work under the direction of a faculty member from outside the department, the selection of a mentor should be made with the approval of the student's advisor. Students should register for directed research credit with that individual if possible; if registration is not possible in the mentor's department, the student should register for HBHE 900 with his/her advisor.

*Electives:*

In addition to fulfilling the core and cognate requirements, students will take additional coursework selected on the basis of their own backgrounds and interests. Any course in the department can be taken as an elective, but some courses have been designated with differing requirements for doctoral and MPH students. Examples include:

- 620: Behavioral Research Methods in Public Health
- 621: Seminar in Behavioral Research Methods in Public Health
- 627: Chronic Illness Interventions: Infancy to Young Adulthood
- 628: Chronic Illness Interventions: Midlife to Older Adulthood
- 633: Social Networks and Social Support in Health Education
- 636: Qualitative Methods and Participatory Action Research
- 638: Qualitative Methods in Public Health
- 670: The Stress Process

Doctoral students interested in other courses in the department can consult with the faculty instructor about the possibility of tailoring the course requirements to their program needs.

For illustrative purposes, three hypothetical trajectories for students with different educational backgrounds and work experience are presented in Table 1, showing possible program sequences for each. *No one student is expected to follow exactly any of these programs.* They are shown only to illustrate program flexibility depending on one's prior background and specific career plans.

Student A has a strong background in psychology but a limited amount of experience in public health. Consequently, the 60-hour program of study for this student includes additional coursework in core areas in public health (e.g., Epidemiology) as well as extra courses in health behavior and health education.

Student B has a M.S. degree in nursing with little background in the behavioral sciences and research methods, but some work experience in a hospital setting prior to admission. In this instance, the individual's plan of study includes a cognate that is most likely to be in a social science as well as additional classes taken in health behavior and health education.

Student C has a M.P.H. degree in health behavior and health education. Consistent with the policy outlined under HBHE Courses above, the basic core coursework for this individual is reduced by 9 hours, reflecting a waiver of 9 hours of classes in health behavior and health education.

**Table 1. Illustrative Programs for Three Hypothetical Students**  
**(Exclusive of work associated with the dissertation and basic biostatistics)**

	Student		
	A (Psych MA)	B (Nursing MS)	C (HB/HE MPH)
Basic Core:			
HB/HE	9	9	--
Doctoral Seminars	12	12	12
Research Methods	6	6	6
Advanced Statistics	6	6	6
Research Experience	6	6	6
Cognate	9	9	9
Epidemiology 503	3	--	--
Electives	9	3	3
<b>Total</b>	<b>60</b>	<b>51</b>	<b>42</b>

## PRELIMINARY EXAMINATION

Students are considered for candidacy by the HBHE Doctoral Curriculum Committee when they have successfully completed all required course work and passed the preliminary examination. **Students are expected to take the preliminary examination in May of their second year in the doctoral program.**

The objective of the HBHE doctoral preliminary exam is to assess whether students are adequately prepared to conduct independent research. Toward this end, the preliminary exam is designed to evaluate students' ability to creatively and rigorously apply theory, knowledge, and methods to real-world public health problems. With respect to theory, the goal is to evaluate the breadth and quality of the knowledge students have acquired in the social and behavioral sciences; students' ability to critically evaluate scientific literature; and their ability to synthesize and apply scientific knowledge in new ways to the development of conceptual models and research questions. With respect to methodological and data analytic skills, the goal is to evaluate the appropriate application and full explication of selected methods, and the ability to operationalize them in a research setting. Finally, the prelim is designed to assess students' ability to draw on their conceptual models to interpret study findings and apply these findings to the development of interventions and policies that address public health problems through social or behavioral change.

### *Schedule and Grading:*

The preliminary exam is to be taken by each doctoral cohort immediately after the winter term of their second year. Grades include High Pass, Pass, Provisional Pass, and Fail. Those graded a provisional Pass must rewrite the same exam in June/July of the same summer. Those graded Fail must retake a new exam the following May.

*General Timeline for taking exam and exam grading (exact dates are announced each fall for that academic year by the Chair of the Doctoral Curriculum Committee):*

1. Students take exam in the first two weeks of May after year 02 in program.
2. Students are informed of their grades in the beginning of June.
3. Students receiving a Provisional Pass rewrite exam between mid-June and mid-July.

4. Students are notified of their grades on the rewrite in mid-September. Grading options now are: Pass or Fail.
5. Faculty graders can encourage or require students given any grade other than High Pass to take additional coursework in an area deemed weak by graders. Completion of such course requirements should not delay candidacy for those who pass, but must be accomplished prior to graduation.
6. Students who pass initially or on rewrite are eligible to advance to candidacy status in the Fall term, if they have completed their course requirements and research experience. Students may advance to candidacy even if they are required to take additional coursework as a condition of passing the prelim.
7. Students who fail either initially or on rewrite will take a new exam the following May with the next cohort. Failing twice is grounds for required withdrawal from the program.

*Evaluation Process:*

1. An assessment of High Pass indicates the student has done a stellar job on the examination.
2. An assessment of Pass indicates an overall sense of competency on the part of the student, and that s/he displays a good knowledge and understanding of key issues. The feedback to students who pass is provided verbally, not in writing, by a designated faculty grader.
3. An assessment of Provisional Pass indicates that the student shows reasonable understanding of the subject, that there are many aspects of the exam which are commendable, but that there are some weaknesses in the response – areas that are not adequately or accurately covered. A designated grader collects feedback from each faculty grader and in mid-June provides the student with detailed written feedback on what the problems are and the sections of the response that require strengthening. The student has one month to complete the rewrite.
4. An assessment of Fail indicates that the response was not adequate. The student is required to take a new exam the following May. The designated grader notifies the student, and based on feedback from the other faculty graders, provides the student

with a written explanation of the grounds for the decision, and suggests or requires possible courses and other types of remedial action for the student to complete prior to reexamination.

**NOTE WELL:**

**All students are expected to be available to take the preliminary examination during the first half of May at the end of their second year and, if they receive a Provisional Pass, to be available from mid-June to mid-July to rewrite it. Please plan accordingly.**

## DISSERTATION

After advancing to candidacy, the student develops a dissertation topic, selects a Chair for their dissertation committee, and assembles the full committee. The faculty advisor need not be on the dissertation committee although the advice of this individual is often sought when the committee is being assembled. A dissertation committee is composed of four faculty members: a chair (who must come from the department), two additional committee members (at least one of whom must come from the department), and a cognate member (who is not a member of the department but is a full voting member of the committee). The final appointment of the committee is made by the Dean of the Graduate School to whom the HBHE Department Chair transmits the proposed committee composition. More details on the dissertation process and requirements related to the composition of the dissertation committee are available in the Rackham Dissertation Handbook. A copy can be accessed at the URL listed next:

[http://www.rackham.umich.edu/student\\_life/publications/dissertation\\_handbook/](http://www.rackham.umich.edu/student_life/publications/dissertation_handbook/)

Students must enroll for at least 8 credit hours of dissertation research (HBHE 995) with their dissertation chair. Finally, students must be enrolled in HBHE 995 during the semester in which they defend the dissertation.

The Dissertation can be written in traditional format or it can be composed of three papers of publishable quality that are related to one another. The traditional format develops an argument throughout the dissertation and provides details and findings of the research done by the student, with each chapter building on previous chapters. The three-paper format includes an introductory and a concluding chapter that preface and draw from all three papers, respectively, but each paper should be able to stand alone. Students should consult with their Dissertation Chair and committee members to determine which format is most appropriate.

While the length of time spent on the dissertation project varies considerably (depending on primary data collection versus secondary data analysis, funding availability, employment issues, etc.), most students complete their dissertations within two or three years after advancing to candidacy.

*Steps in completing the dissertation requirements:*

Students are required to prepare a written prospectus of the dissertation project for approval by the dissertation committee in an oral defense. Students should aim to complete their prospectus by the end of the term following their advancement to candidacy.

The following guidelines should be followed in the development of the prospectus:

- (1) The prospectus contains an abstract, which should provide a brief statement of not more than 250 words, which concisely and clearly states the problem to be investigated. The abstract should contain the dissertation title, the student's name, and the dissertation committee members.
- (2) The prospectus describes the problem to be examined and relate the proposed research to previous theoretical and empirical literature in the area. A bibliography of the most closely related literature should be appended to the prospectus.
- (3) The prospectus lists the specific questions that are to be elucidated. If appropriate, these questions should be stated as hypotheses.
- (4) The prospectus describes the research design and research techniques that are to be used. This section should specify the overall design and whatever problems are associated with it, specific research techniques to be employed, the relevant controls that must be introduced (if applicable), and expected problems of data analysis. If appropriate, the candidate should present some of this analysis in the form of dummy tables.
- (5) The prospectus explains the sources of data to be used and should evaluate their apparent adequacy for the candidate's purposes.

- (6) The prospectus may estimate whatever logistical problems are foreseeable and how they are to be handled. Such problems include access to funds, data, computer services, and expert advice.
- (7) The prospectus should outline whether the student proposes to complete the dissertation in book form or in the three paper format. If the latter, the three papers should be described.
- (8) The prospectus may include a tentative time schedule.

Upon completion of the prospectus, the student schedules an oral prospectus defense with their committee. The goal of the defense is for the student and all committee members to arrive at a shared understanding of the work the student needs to accomplish to prepare an acceptable dissertation.

When the dissertation is written, the student must complete a successful oral defense of the dissertation before their committee. Others may also attend the thesis defense and the date, time, and location are publicized. The student presents their dissertation research and then the floor is open to any one in attendance to ask questions. Following a first round of questions, those who are not members of the Dissertation Committee are asked to leave. After a period of questioning by the committee members, the candidate leaves the room as well. At that time the committee will determine whether the written dissertation can be accepted or whether it requires revision first. Once the committee accepts the initial or revised dissertation, and all required coursework is finished, the student has completed the requirements for the degree.

Note that the Horace H. Rackham School of Graduate Studies requires a total of 68 fee credit hours (50 when a reduction has been made by the Doctoral Committee for a relevant Master's degree) for completion of the doctoral program. Thus, if the student has not satisfied this requirement at the time of completion of all other degree requirements, the remaining dissertation fees may be paid to the University at that time.