



UNC CHARLOTTE

Office of Academic Affairs

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January 17, 2013

Courtney H. Thornton, Ed.D.
Associate Vice President for Research and Graduate Education
General Administration
University of North Carolina
910 Raleigh Road
Post Office Box 2688
Chapel Hill, North Carolina 27515-2688

Dear Dr. Thornton:

Enclosed is UNC Charlotte's updated Request for Authorization to Establish a new Ph.D. in Public Health Sciences. The following changes have been made to address the questions posed in the January 9, 2013 communication:

1. **Collaboration and program uniqueness:**

The proposed Ph.D. program does share content with the UNC-CH program, as it would with any doctoral program in the social and behavioral health discipline. Given the outstanding quality and rank of the UNC-CH program, we would be remiss if the proposed Ph.D. did not have some elements in common with the UNC-CH program.

We have taken the opportunity to further clarify the uniqueness of the proposed Ph.D. program and its emphasis on different methodological components and a more intensive focus on professional competence as it relates to teaching, research and ethics (p. 21). Thus, the primary differences between the two programs are demonstrated by curricular emphasis (required course content vs. elective content) and perspective (U.S. focus vs. global/international lens). Other avenues for collaboration with programs and faculty across the UNC system are also considered (p. 14).

2. **Societal demand:**

Data from the Bureau of Labor Statistics has been included to show the potential employment growth for health educators and post-secondary teachers. We have also consulted recent Council for Education in Public Health self-study reports from the programs listed (p.21) that indicate exceptionally high employment rates within the field for individuals with graduate-level degrees in the behavioral health sciences (pp. 17-19).



3. **Student demand:**

The description of the survey, respondents and the results has been clarified (pp. 9-11), including a relevant data table. It is felt that students in doctoral programs are indeed in public health programs, as the data indicated are from current HSR doctoral students and MSPH alumni. We are not aware of any MSPH graduates in doctoral programs that are other than public health or behavioral-related (e.g. health psychology).

Thank you for your consideration of this request and please let me know if I can provide additional information.

Cordially,

A handwritten signature in blue ink that reads "Joan F. Lorden". The signature is fluid and cursive, with the first name "Joan" being the most prominent.

Joan F. Lorden

Provost and Vice Chancellor for Academic Affairs

cc: Nancy Fey-Yensan, Dean, College of Health and Human Services, UNC Charlotte



UNC CHARLOTTE

Office of the Chancellor

9201 University City Boulevard, Charlotte, NC 28223-0001
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August 29, 2012

Dr. Chris Brown
Vice President for Research and Graduate Education
General Administration
University of North Carolina
Post Office Box 2688
Chapel Hill, North Carolina 27515-2688

Dear Dr. Brown:

Enclosed is UNC Charlotte's updated request for authorization to establish a Ph.D. in Public Health Sciences. The enclosed request has been revised to meet the requirements of the newly established academic program review and approval process. The proposed program focuses on the training of researchers and professionals to address contemporary public health issues while being responsive to the community.

Thank you for your consideration of this request. Provost Joan Lorden or I would be pleased to respond to any questions that you may have.

Cordially,

A handwritten signature in cursive script that reads "Phil".

Philip L. Dubois
Chancellor

cc: Provost Joan F. Lorden
Dean Nancy Fey-Yensen, College of Health and Human Services



¹APPENDIX C

THE UNIVERSITY OF NORTH CAROLINA REQUEST FOR AUTHORIZATION TO ESTABLISH A NEW DEGREE PROGRAM

INSTRUCTIONS: Each proposal should include a 2-3 page executive summary. The signature of the Chancellor is required. Please submit one hard copy and an electronic copy of the proposal to the Office of the Senior Vice President of Academic Affairs at UNC General Administration.

Date: 1-16-13

Constituent Institution: The University of North Carolina at Charlotte

CIP Discipline Specialty Title: Public Health General

CIP Discipline Specialty Number: 51.2201 Level: B _____ M _____ 1st Prof _____ D x

Exact Title of the Proposed Degree: Public Health Sciences

Exact Degree Abbreviation (e.g. B.S., B.A., M.A., M.S., Ed.D., Ph.D.): Ph.D.

Does the proposed program constitute a substantive change as defined by SACS? Yes x No _

The current SACS Substantive Change Policy Statement may be viewed at:
<http://www.sacscoc.org/pdf/081705/Substantive%20Change%20policy.pdf>

If yes, please briefly explain.

As required by the Policy Statement on Substantive Change for Accredited Institutions of the Commission on Colleges, the University of North Carolina at Charlotte (UNC Charlotte) is required to submit a letter of notification prior to implementation for new degree programs. Notification of this new degree program will be provided to SACS after approval by the University of North Carolina Board of Governors and prior to implementation.

Proposed date to establish degree program: Month August Year 2013

Are there plans to offer all or a portion of this program to students off-campus or online? Yes _____ No X

If yes, complete the form to be used to request establishment of a distance education program and submit it along with this request.

Note: If a degree program has not been approved by the Board of Governors, its approval for alternative, online, or distance delivery must wait until BOG program approval is received. (400.1.1[R], page 3)

¹ This Appendix C supersedes the preceding Appendix C entitled, "Request for Authorization to Establish a New Degree Program," adopted May 6, 2009.

Executive Summary

The Department of Public Health Sciences (PHS), in the College of Health and Human Services (CHHS), proposes to implement a Ph.D. in Public Health Sciences at UNC Charlotte. The PHS department has a strong foundation in terms of both teaching and research that is essential to support a Ph.D. program. This foundation is evidenced by our diverse faculty training in the core areas of public health, our teaching qualifications based on our experience teaching in the Health Services Research Doctoral (HSRD) program, and our recent accreditation as a Public Health program by the Council on Education in Public Health (CEPH) in Spring 2009. This proposed Ph.D. articulates with existing programs - including the Health Services Research Ph.D. and the Health Psychology Ph.D. - and is consistent with the goals of CHHS and the overall strategic plan for the University as outlined in UNC Tomorrow (<http://www.provost.uncc.edu/Reports/UNCTomorrow-Phase1.pdf>). In particular, the Ph.D. in Public Health Sciences will form the cornerstone to propel UNC Charlotte toward its goal of establishing the second accredited School of Public Health in North Carolina.

This Request for Authorization to Establish a Ph.D. in Public Health Sciences with a concentration in Behavioral Sciences speaks directly to the health issues faced by the residents of North Carolina. Many of the health problems in the state and in the nation are associated with underlying behavioral risk factors such as poor diet, lack of physical activity, poor disease management, tobacco use, underutilization of primary care, alcohol abuse, etc., which contribute to chronic disease and disability. While many of these lifestyle behaviors are ultimately up to the individual, the social, cultural and physical environment contribute significantly to either facilitate or impede an individual's motivation and ability to engage in a healthy lifestyle. Thus helping the population lead healthier lifestyles requires multi-level approaches consistent with the social ecological model that is the cornerstone of public health.

Recent data suggest that we will not have the capacity in the public health workforce to meet population health needs. Estimates indicate that by 2020, the US will face a shortage of 250,000 public health workers (Association of Schools of Public Health (ASPH), 2008). This expected shortfall is the result of several trends: 1) an existing shortage in the public health workforce; 2) expected retirement of baby boomer public health workers; 3) increasing needs of a growing elderly and diverse population; and 4) a lack of capacity among current public health education providers. Another consideration is that the current public health workforce are trained in other disciplines but working in public health. There is increased demand for workers trained in public health from accredited programs and schools. As the field of public health expands and evolves, there is increased emphasis on certification for public health workers. These factors contribute to the timeliness of the proposed degree program and the demand for public health workers and doctorally-prepared graduates to educate and train them.

The curriculum as designed has multiple strengths. One, we sought to maximize use of existing faculty and coursework within the College of Health and Human Services. Two, the proposed curriculum is complementary to existing health degree programs, at both the master's and doctoral level within the University. This approach will take advantage of feeder programs and the ability to cross-list classes, providing more course options for doctoral students. Three, the program provides students with specific professional training needed to be successful, such as teaching skills with associated supervised teaching and then teaching practice. Four, the

curriculum was designed initially based on an approved conceptual model to train behavioral scientists and we developed specific competencies to facilitate the accreditation process. Five, we consulted with intra- and inter-institutional peers and other doctoral programs regarding program administration, potential implementation issues, etc. to make reasonable projections regarding enrollment and graduation estimates. Six, we planned for the future; designing an umbrella degree with a curriculum structured so that additional degree tracks can be added as needed for future growth consistent with the strategic plans of the Department, the College and the University.

The proposed program does require additional investment of resources in terms of personnel and technology. Three new faculty positions are needed for program administration and for curriculum delivery. Additional software is needed for classroom labs to provide advanced analytical training in both quantitative and qualitative methods. These additional faculty members are essential in helping us maintain the student to faculty ratios required by our accrediting body (the Council on Education for Public Health).

The proposed Ph.D. program will continue the educational excellence of the University of North Carolina Charlotte, makes effective use of available resources, and is responsive to the public health demands of our state, region and nation. Approval by the UNC Board of Governors would further the development and leadership of the Department of Public Health Sciences in our efforts to meet a critical societal need facing the greater Charlotte region, while also serving the state and the nation.

I. DESCRIPTION OF THE PROGRAM

A. Describe the proposed degree program (i.e., its nature, scope, and intended audience).

The Department of Public Health Sciences (PHS), in the College of Health and Human Services (CHHS), proposes to implement a Ph.D. in Public Health Sciences at UNC Charlotte. The considerable strengths of our department are evident to support the development of a rigorous Ph.D. program in Public Health Sciences that is relevant to contemporary public health; consistent with the growth of UNC Charlotte's research programs; and aligned with needs of the region, the state, and the nation.

The PHS department has a strong foundation in terms of both teaching and research that is essential to support a Ph.D. program. This foundation is evidenced by our diverse faculty training in the core areas of public health, our teaching qualifications based on our experience teaching in the Health Services Research Doctoral (HSRD) program, and our recent accreditation as a Public Health program by the Council on Education in Public Health (CEPH) in Spring 2009. This proposed Ph.D. articulates with existing programs - including the Health Services Research Ph.D. and the Health Psychology Ph.D. - and is consistent with the goals of CHHS and the overall strategic plan for the University as outlined in UNC Tomorrow (<http://www.provost.uncc.edu/Reports/UNCTomorrow-Phase1.pdf>). In particular, the Ph.D. in Public Health Sciences will form the cornerstone to propel UNC Charlotte toward its goal of establishing the second accredited School of Public Health in North Carolina.

Nature and Scope

The Ph.D. in Public Health Sciences is designed as an umbrella degree in public health that will initially have a single concentration focusing on social and cultural factors that contribute to health behaviors and health outcomes. This concentration meets the core public health area of behavioral sciences. As the department expands, additional concentrations in the other core areas of public health can be added to create new doctoral degrees. The importance and relevance of the initial emphasis on behavioral science are evident in the overarching goals identified in Healthy People 2020: 1) to increase quality and years of life free of preventable disease, injury and premature death; 2) to achieve health equity, eliminate health disparities, and improve the health of all groups; 3) create social and physical environments that promote good health for all; and 4) promote quality of life, healthy development, and healthy behaviors across all life stages (see <http://healthypeople.gov/2020/about/default.aspx>).

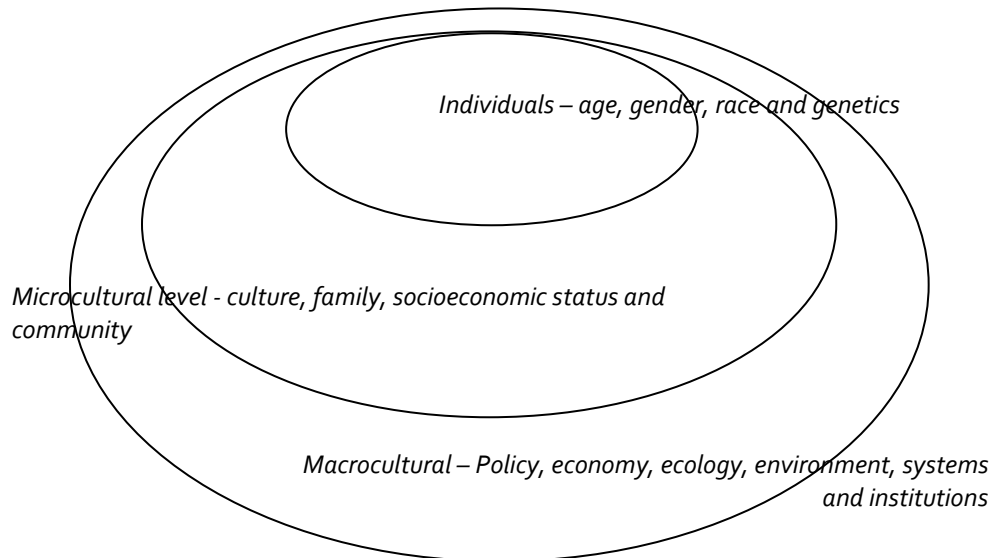
The focus of the proposed Ph.D. in Public Health Sciences is to train researchers and professionals with skills essential to address contemporary public health problems at the individual, community and population levels with emphasis on social determinants related to the prevention and management of disease and disability.

Public health is a broad field encompassing many disciplines, activities, and stakeholders, and is focused on serving entire populations from communities, cities, and counties, to states and nations. As early as 1920 public health was defined as “the science and art of preventing disease, prolonging life and promoting health and efficiency through organized community effort” (Turnock, 2004), and more recently as “fulfilling society’s interest in assuring conditions in which people can be healthy” (also Turnock citing IOM). Public health encompasses research in social and behavioral health factors, epidemiology, environmental and occupational health, biostatistics, and health policy. These five core areas form the basis for public health research and practice and are required teaching for any accredited public health school or program.

As one of the core areas of public health, the behavioral sciences focus on understanding and influencing the social determinants that affect health behavior within populations, societies and communities. Medicine is concerned with individuals and uses a biomedical approach to heal patients who have disease “...public health regards the community as its patient. ...Public health focuses on preventing illness.”(Schneider, 2006). As in other fields, public health researchers and practitioners use a biopsychosocial approach to health and illness. The *population* focus of public health, however, distinguishes the aims of public health activities and research from other disciplines, and spans across institutions, communities, geography and culture in an effort to improve human health. Thus, public health researchers and faculty come from diverse backgrounds in medicine, psychology, sociology, nursing, anthropology, geography, gerontology, and economics.

The behavioral sciences concentration is guided by the social ecological model (McElroy & Jezewski, 2000). An emphasis on behavioral sciences encompasses more than just examining individual health behaviors related to disease to include social determinants of health including: family structure (marriage, divorce, childbearing), the environment (air quality, built environment, workplace, neighborhood), changes in policy (Medicare prescription benefit or welfare to work programs), and changes in social conditions (increased crime, literacy, immigration) (Braveman, Egerter, & Mockenhaupt, 2011; Centers for Disease Control and Prevention, 2006). These interactions occur at multiple levels of the ecological model (see Figure 1): individual, microcultural and macrocultural (McElroy & Jezewski, 2000). Research and knowledge about behavioral influences on health and illness must necessarily examine the multiple social contexts and interactions that can influence an individual’s attitudes, beliefs, and behaviors. Examining the multilevel causes of disease to improve health and prevent illness is at the forefront of our nation’s strategy to improve population health (Mabry, Olster, Morgan, & Abrams, 2008).

Figure 1. Analytic domains in the experience of health and illness – redrawn and modified from McElroy and Jezewski, 2000.



The ability to address social and behavioral factors across multiple levels requires a breadth and depth of methodological skills, which include basic quantitative approaches as well as qualitative techniques. An increasing focus of public health social and behavioral research is on community-based, participatory research (CBPR), acknowledging the need to have community participants establish public health priorities and approaches to developing and testing solutions to health problems (Minkler & Wallerstein, 2003). Multiple institutes within the National Institutes of Health have program announcements to solicit CBPR proposals.

Public health by its very nature is interdisciplinary to include scientists, practitioners, and community partners from a broad spectrum of disciplines and organizations working together to improve the populations' health. As more and more health problems are recognized as stemming from social issues such as poverty and crime and as the prevention and treatment of those problems becomes the responsibility of the individual as well as the community, the need for trained researchers in the social and behavioral sciences with a public health focus becomes even more critical (Centers for Disease Control and Prevention, 2006). Virtually every health issue in the US has a behavioral component whether viewed from the level of either the individual, family, health care provider, or the larger health care system.

The increasing need for a dramatically larger public health-trained workforce has been well documented (Gebbie, et al., 2003; Turnock, 2006). The Association of Schools of Public Health (ASPH) reports that almost one-quarter of the current public health workforce will be eligible to retire in 2012 (Association of Schools of Public Health (ASPH), 2008). Schools of public health will need to increase their number of graduates three-fold in order to meet the impending deficit and the future public health workforce need of an additional 250,000 workers (ASPH, 2008).

State governments and universities have responded to the need with a rapid growth in schools and programs of public health to meet the demand for public health workers; the number of accredited schools of public health has increased 20% in just 6 short years and more schools are planned (Council on Education for Public Health, 2006).

Nationally, several trends in public health demonstrate the need for more public health researchers trained in the social and behavioral sciences. First, there is a rapid shift in demographics in the US. Our nation is aging rapidly as Baby Boomers reach age 65, and the birth rate hovers at the replacement rate. As a result, we have greater numbers of older adults who are living longer, but many have chronic diseases and experience years of living with disability. Managing chronic disease through appropriate self-care behaviors becomes increasingly crucial to maintaining years of healthy life and longevity. Understanding the barriers that chronic illness sufferers face in responding to the demands of their diseases is crucial to improving the nation's quality of life.

The rise in minority populations in the US will drive an increased need for knowledge about cultural factors related to health and health behaviors as we adapt to the many immigrant populations settling in our cities and states. The immigrant and ethnic minority populations that currently reside in the US are among the fastest growing population groups. Our nation will experience significantly greater cultural diversity in population as Whites become a minority by 2050. Racial and ethnic minority groups are already one-third of the population (U.S. Census Bureau, 2006), and four states now have White minority populations (Pear, 2005). According to the latest statistics for Mecklenburg County (Mecklenburg County Health Department: Health Disparities Taskforce, 2006), the Hispanic population has increased over 500% since the 1990 Census. According to the 2010 census Hispanics are currently 13.1% of the Charlotte population. Indeed, the Charlotte metropolitan region has been labeled by scholars from the Brookings Institute as the US' fourth fastest growing "Hispanic Hypergrowth" region (Suro & Singer, 2002). In contrast, non-Hispanic Whites have decreased to less than 50% of the population, while Blacks are 35%. These trends hold implications for not only for the public health workforce who need to be trained in cultural competencies, but also for the University in terms of needing a diverse faculty to work within these communities and to be effective educators with a diverse student body.

Even while many infectious diseases associated with childhood are waning in the US, the spread of HIV/AIDS, tuberculosis, and sexually transmitted infections are all increasing in North Carolina, the US, and abroad. This trend is of particular concern in the African American community, where rates of HIV were 8 times higher for non-Hispanic Blacks as compared to Whites, and rates for syphilis were 14 times higher for non-Hispanic Blacks than Whites (HIV/STD Prevention and Care Branch, 2004). The majority of new cases of HIV/AIDS are among heterosexual Black women (MMWR, 2005). These diseases also owe their virulence to behaviors, attitudes and beliefs reflecting demographic, social and cultural mores in this population, which affirms the critical need for doctorally prepared researchers with training in social and behavioral research as it relates to public health, both domestically and internationally.

This training must include “an understanding of the multiple determinants of health within the ecological model” (Gebbie, et al., 2003).

The increased emphasis on addressing health disparities that occur among gender, racial and ethnic, and age subgroups within our society will necessitate more research that requires training in behavioral and social science methods. Health disparities will not be resolved solely by achieving equity in health care access (Institute of Medicine, 2003). We must understand how and why people choose to self-treat, their cultural and familial understanding of health and illness, their decision-making processes to access the formal health care system, their experiences within that system, and how that health care experience influences their decision to adhere to a prescribed program of treatment.

Increasingly, research supports the notion that it is the social construction of age, gender, race, and class that influences how individuals respond to health threats, not biology (Glass & McAtee, 2006). These factors have evolved into psychosocial constructs related to stress, discrimination, racism, ethnicity, and disadvantage. The measurement of these constructs has been deemed an important funding priority for the National Institutes of Health (NIH) as demonstrated through recent program announcements (e.g. PA-06-344, PA-06-343, PA-07-060). The development of valid and reliable measures to assess psychosocial constructs requires a broad range of skills including: qualitative analysis, quantitative analysis, and psychometrics; these skills are a particular focus of the behavioral sciences concentration and are important tools to public health scientists.

Regionally. Over one-third of deaths in 2000 were due to unhealthy behaviors (e.g. smoking, physical activity and diet, and alcohol consumption) (Mokdad, Marks, Stroup, & Gerberding, 2004, 2005). The latest North Carolina Prevention Report Card grades the state’s primary prevention efforts (NC Prevention Partners, 2010). Since 2000, North Carolina has improved from a “D” to a “B” in tobacco prevention; maintained a “D” in nutrition over the 10 year period; and progress in physical activity has had a backslide from a “C-“ to a “D+” (NC Prevention Partners, 2010). These same behaviors are linked to increasing rates of obesity and chronic illness, firmly establishing North Carolina as part of the South’s “stroke belt” and now “diabetes belt” (Barker, Kirtland, Gregg, Geiss, & Thompson, 2011). The growing obesity epidemic among all age groups, but particularly in children, is resulting in teenagers experiencing onset of Type II or adult-onset diabetes. North Carolina ranks fifth in the nation for prevalence of youth obesity and almost two-thirds of adults are overweight or obese (NC Prevention Partners, 2008). There is much we still do not know about how to best influence communities to adopt healthier behaviors before the onset of illness when primary prevention is achievable, and thus it is critical that we focus our efforts on cross-cutting training in public health sciences (American Academy of Health Behavior Work Group on Doctoral Research Training, 2005).

Since the 2000 census, the Charlotte population has grown by 35% (<http://2010.census.gov/news/releases/operations/cb11-cn61.html>). Given the exponential population growth in the surrounding Charlotte area and the city’s transition to a major urban area, our public health and research needs have similarly grown. The Ph.D. in Public Health

Sciences fills a key niche in the region as we address the health issues that accompany urbanization. The Charlotte region is now coping with environmental issues related to air quality and the physical built environment; an increasing immigrant population requiring greater cultural competence and understanding of ethnic and cultural health beliefs; and the need for greater community engagement to make UNC Charlotte a community force for change and improved health. An example of the type of important local research collaboration that has occurred is Dr. Beth Racine's collaboration with Geography faculty to examine "food deserts" in low-income communities and their relationship to premature mortality rates from cardiovascular disease and diabetes (<http://ui.uncc.edu/story/mecklenburg-county-community-food-assessment-2010>).

The imperative for relevant public health research is evidenced in the most recent draft of the Office of Behavioral and Social Sciences Research (OBSSR), NIH strategic plan (2007) that discusses the past, present, and future of social and behavioral research. Based on a report developed by the National Research Council (NRC, 2001) for OBSSR, ten priorities have been identified that require increased research in behavioral and social sciences:

1. Predisease pathways
2. Positive health
3. Gene expression
4. Personal ties
5. Healthy communities
6. Inequalities
7. Population health
8. Interventions
9. Methodology
10. Infrastructure

NIH, through the OBSSR, reaffirmed their commitment to training social and behavioral researchers to participate in interdisciplinary research teams at all phases of the research process. For example, the OBSSR sponsors a Summer Institute on the Design and Conduct of Randomized Clinical Trials Involving Behavioral Interventions directed primarily at new investigators http://obssr.od.nih.gov/Conf_Wkshp/RCT/RCT_Info.htm#objective .

Intended Audience – The proposed Ph.D. in Public Health Sciences will be of interest to students from a broad range of backgrounds and training. Graduates from master's programs in CHHS (M.S.W., M.S.N., M.H.A., M.S.P.H. and the M.S. in Clinical Exercise Physiology) are potential students. Students from other master's program across UNC Charlotte who are also likely to apply are from: Geography, Sociology, the newly authorized M.A. in Anthropology, Communication Studies, Gerontology, Philosophy, Economics, Public Administration, or master's students from the College of Computing and Informatics.

We conducted a broad interest survey in Fall 2012 to determine demand for the proposed PhD program and to estimate a projected pipeline of applicants. The survey was sent to current graduate students in public health, nursing, social work, kinesiology, geography, gerontology, communication studies, economics and health services research; current students in our BSPH

program; and alumni from our public health baccalaureate and master’s degree programs and the HSR doctoral program. Some staff members also responded to the survey as it was publically available on our website. Overall, there were 200 valid responses including 56 alumni and 10 HSR doctoral students.

The table below presents the results from respondents who are likely potential doctoral students. Data from current BSPH undergraduates suggests significant interest in doctoral education in public health (57%). However, we recognize that these numbers are speculative as undergraduate students will have many opportunities and challenges after graduation. A small number of BSPH alumni responded to the survey (n=11). Of these, one is already in a doctoral program and eight are considering a doctoral degree.

Based on responses from current master’s level students, including those with degrees outside of public health, and MSPH and MHA program alumni (these are individuals eligible for admission to a doctoral program in the next 12-24 months; n=135), 42% are definitely considering doctoral education. Over 60% of our current MSPH and MHA students said they are extremely or moderately interested in a PhD in Public Health. Among current students who are enrolled in non-public health-related master’s programs at UNCC (n=46), 46% are extremely or moderately interested in a PhD in public health; this statistic is notable as we have not initiated any advertising or recruiting for the proposed PhD. Among MSPH and MHA alumni, 42% are interested in further education in public health with 13% already enrolled in a doctoral program. Other non-public health alumni (57%) also expressed interest in a PhD in public health as well as some staff (22%).

Survey respondents*	N	Considering doctoral education	Extremely/moderately interested in PhD in Public Health	Would consider UNCC for doctoral education	Timeframe for applying to doctoral program
Current students (n=125)				58/125 = 46%	
BSPH	28	16 yes (57%) 10 maybe (36%)	16 (57%)		1-2 yrs = 8 3-5 yrs = 10
MSPH and MHA	51	18 yes (35%) 22 maybe (43%)	31 (61%)		1-2 yrs = 21 3-5 years = 9
Other master’s	46	22 yes (48%) 16 maybe (35%)	21 (46%)		1-2 years = 12 3-5 years = 9
Alumni (n=56)				23/43= 53%	
BSPH	11	3 yes (27%) 5 maybe (45%)	8 (73%); 1 is currently enrolled in PhD		1-2 yrs = 3 3-5 yrs = 2

MSPH and MHA	38	17 yes (45%) 13 maybe (34%)	16 (42%); 5 are currently enrolled in PhD		1-2 years = 13 3-5 years = 3
Other baccalaureate and master's alumni	7	3 yes 3 maybe	4 (57%)		1-2 yrs = 3 3-5 years = 1
Staff/other (n=9)	9	5 yes 2 maybe	2 (22%)	6/9 = 66%	Applying now = 2 1-2 yrs = 3

* HSR students are discussed separately (n=10).

The majority of master's trained respondents interested in doctoral education are applying for admission in the next 1-2 years with a smaller number considering applications in the next 3-5 years.

Further, of the students who are currently enrolled in a doctoral program (including 10 HSR students), 81% would have considered applying for a PhD in Public Health at UNC Charlotte if it had been available. Overall, these data suggest considerable continued interest in the field of public health, significant student demand for doctoral education, and substantial willingness to return to UNC Charlotte based on students' previous academic experience.

External to UNC Charlotte, regional schools such as Appalachian State University, Western Carolina University, Queens University, Winston Salem State University, Clemson University and Wake Forest University also train potential students. Local employers are another important source of potential students. There is a large healthcare industry in Charlotte; for example, Carolinas HealthCare System employs 40,000 people and is the third largest healthcare system in the US. Another large healthcare complex is Presbyterian HealthCare owned by Novant Health. There is also a Veteran's hospital (Hefner VA Medical Center) located in Salisbury (40 miles away). At a recent informational event to promote our MSPH and MHA programs, we had over 40 attendees from local employers (predominated by Carolinas HealthCare) and surrounding universities including University of North Carolina Greensboro, Winston Salem State University, Appalachian State University, Johnson C. Smith University, Winthrop University, Queens University, and James Madison University. The diverse representation at this session suggests that our programs have a substantial reach in the community and the state and a solid reputation for quality.

Further, our colleagues at UNC Chapel Hill indicate in their letter of support that they accept 10 students per year in the social and behavioral sciences doctoral program from over 100 qualified applicants; suggesting that there is substantial unmet need within the state. *"Given the overall need for highly trained public health scientists, we believe there is sufficient room in North Carolina to support a second doctoral program in our discipline...."*

Our current program accreditation will also extend the reach of the proposed degree program outside of the regional area. Importantly, *the Ph.D. has been designed explicitly to meet CEPH criteria* so that we can apply for its accreditation as soon as there are degree graduates.

B. List the educational objectives of the program.

Doctoral students require immersion in disciplinary content and in the research environment. These goals are best accomplished through a research apprenticeship with faculty members who have ongoing research projects (American Academy of Health Behavior Work Group on Doctoral Research Training, 2005). Learning the research process cannot be accomplished solely in the classroom, and successful new Ph.D. graduates will have already had opportunities to design and conduct research, present research, and publish research; a rich and nurturing academic environment must be established to provide those opportunities. Consistent with the most current thinking on how to educate health professionals to meet the emerging challenges that our planet faces, our curriculum is competency based (Frenk, et al., 2010). Our program and its curriculum are guided by a set of competencies we have developed based on the American Academy of Health Behavior Work Group on Doctoral Research Training (2005) – see Appendix A2. The proposed program establishes the following educational objectives:

- prepare graduates with analytical skills to conduct research on social and behavioral factors in a variety of public health and community settings;
- prepare graduates to design, conduct, and analyze behavioral science research relating to public health using advanced quantitative and qualitative methods;
- prepare independent scientists and scholars with focused writing skills to obtain appropriate research funding and to write for publication;
- prepare independent scientists and scholars with communication and methodological skills necessary to advance and disseminate behavioral science knowledge to community/lay, practitioner, academic, and scientific audiences; and
- instill graduates with enthusiasm for interdisciplinary collaboration and solid principles necessary to engage in culturally competent and ethically sound research practices with all participants and colleagues.

C. Describe the relationship of the program to other programs currently offered at the proposing institution, including the common use of: (1) courses, (2) faculty, (3) facilities, and (4) other resources.

In addition to master's level programs that may provide potential students, PHS department faculty are involved across campus in many different degree programs, research entities, and collaborative efforts. For example, several faculty members are Associates in the Center for Professional and Applied Ethics (CPAE). The CPAE sponsors seminars and presentations concerned with ethical topics that span disciplinary fields. The CPAE is open to faculty and students interested in health-related ethical issues. Our department faculty members participate

widely in public health-related Ph.D. programs. Three faculty members are affiliated with the M.A. in Gerontology (the Drs. Laditka and Dr. Warren-Findlow). Four faculty are affiliates of the Health Psychology Ph.D. program (Drs. Harver, Piper, Portwood, and Warren-Findlow). Dr. Huber, Dr. J. Laditka, S. Laditka, and Dr. Racine are all associated with the Public Policy Ph.D. Drs. Harver and Huber are also graduate faculty for the Biology Ph.D., and half the department either teaches or serves on dissertation committees for the Health Services Research Ph.D. Almost all PHS faculty members are currently formally affiliated with other degree programs on campus highlighting the multidisciplinary nature of Public Health and the breadth of PHS faculty interests.

The primary relationship between the proposed Ph.D. in PHS and other Ph.D. programs on the UNC Charlotte campus is with the Health Services Research (HSR) Ph.D. that is currently housed in the College of Health and Human Services. The HSR Ph.D. focuses on analyzing health outcomes (typically clinical health outcomes) with the aim of improving the quality, cost effectiveness, delivery and organization of health care. Methodologically the emphasis in the HSR Ph.D. is primarily on quantitative analysis.

- 1. Courses:** The HSR Ph.D. contains a series of courses related to quantitative methods that will also form the core quantitative methods courses in the PHS Ph.D. Six existing courses will be cross-listed as agreed to by the PHS Department Chair and the HSR Program Director (see Appendix A3 - Talbot Letter of Support). Currently PHS department faculty teach these HSR courses. HSR students would also be able to take PHS doctoral classes as electives.

A secondary relationship is between the PHS Ph.D. and the Health Psychology Ph.D. in the College of Liberal Arts and Sciences. The Health Psychology Ph.D. has three tracks with an emphasis on health behaviors related to individual health and illness outcomes with a focus on interventions delivered within the health care system. As an interdisciplinary degree, Health Psychology Ph.D. students are required to take 15 credits in an area outside of their field. Many Health Psychology students register for master's level classes in the PHS department. These students would now be able to select from both master's and doctoral level classes within our department.

- 2. Faculty:** As described above, PHS department faculty already teach in the HSR Ph.D. program so there would be a common use of faculty resources between these two programs. Faculty members within CHHS and UNC Charlotte who are designated as *Doctoral Affiliates* will also have the opportunity to teach in the PHS Ph.D. program (see Section IV.A).

- 3. Facilities** – The PHS Ph.D. would be housed within the PHS department located in CHHS. CHHS is located in a new physical space with state-of-the-art “smart” classrooms with wireless connectivity. There is also office space for all faculty members, conference rooms, two student computing labs, and available office space for students. We anticipate that doctoral students would also be utilizing the Atkins Library and the CHHS Health

Informatics team resources. The Health Informatics group consults with students and faculty on instructional technology, providing connectivity and access to hardware and software, and troubleshooting computing problems within the College.

4. Other Resources – At UNC Charlotte, all graduate students have access to the Center for Graduate Life (CGL), which routinely offers courses, seminars, and workshops addressing graduate assistantships, teaching assistantships, and navigating the dissertation process. The CGL is housed in a neighboring building and provides graduate students with a centralized space dedicated to their needs with the intent of creating a community of shared experiences and discourse. CGL provides a student lounge, smart classroom, computer workstations, writing support, ombudsperson and access to the Graduate School Student Affairs Offices.

D. Identify opportunities for collaboration with institutions offering related degrees and discuss what steps have or will be taken to actively pursue those opportunities where appropriate and advantageous.

Through our consultations with other degree programs in the state, there are opportunities for collaboration with UNC Greensboro's (UNCG) Dr.PH program. UNCG has a small but robust program training doctoral students in community health education. Given the relative proximity of these two schools, the opportunity exists for students to take courses at the sister institution (see section II.B.1.b). Similarly, the possibility to conduct joint research projects that would include doctoral students from both programs and encompass the broader Charlotte and Piedmont region also were discussed at a meeting held at Greensboro with UNCG Dr.PH administrators in September 2011. These initial conversations laid the groundwork for potentially fruitful collaborations. We look forward to taking advantage of additional collaboration research opportunities with other institutions within the UNC system. An early example of this type of collaborative opportunity is our existing agreement with UNC Chapel Hill to contribute to its externally funded project "Research Supplements to Promote Diversity in Health-Related Research." As a subcontractor to this project, one of our core faculty members is contracted to work with UNC Chapel Hill's Center for Diabetes Translation Research to Reduce Health Disparities program to develop her research capabilities while engaging in coursework, seminars, national diabetes conferences, goal-directed mentoring, and conduct of both a quantitative and qualitative research study.

Encouraging students to consider having faculty members from other UNC schools serve on their dissertation committees is another way to leverage strengths across programs. Obtaining outside expertise or a complementary skill set can advance students' perspectives and deepen their understanding of their chosen area. Similarly, suggesting that students seek out additional content experts for collaborations when drafting manuscripts or grant proposals is also

desirable; however, we cannot mandate that faculty from other schools participate.

II. JUSTIFICATION FOR THE PROGRAM—NARRATIVE STATEMENT

A. Describe the proposed program as it relates to:

1. Institutional mission

The proposed Ph.D. is fully aligned with the institutional plans and priorities of UNC Charlotte, including the continued importance of the University as a premier urban research institution and emergence as a resource for health-related research. The Charlotte region needs to accelerate UNC Charlotte's development to ensure that a 'top tier' research university exists to support the growing economy of North Carolina's largest city.

2. Strategic plan

As part of the UNC Charlotte's UNC Tomorrow plan, the department, the College, and the University have identified establishing an accredited School of Public Health (SPH) as a major strategic goal. With the implementation of the UNC Tomorrow planning effort, this strategic goal has now been identified as one of the major new strategies for CHHS and for UNC Charlotte with respect to improving health and wellness in western North Carolina (Recommendation 4.5.1.b "accelerate the establishment of the School of Public Health."). Toward that end, in 2007-2008 the department convened a SPH Planning and Steering Committee with key campus, regional, and state-level stakeholders who were invited to a series of roundtable meetings to discuss the development and establishment of an SPH and to map a strategy and timeline for our efforts. In 2010-2011, the department organized a broader on-campus group (the School of Public Health Planning Committee) and an off-campus group of key stakeholders (the School of Public Health Steering Board). The School of Public Health Planning Committee is composed of faculty members representing each college on campus and multiple departments interested in social and behavioral determinants of health. The School of Public Health Steering Board consists of community leaders representing both public and private health care entities, community organizations, and key constituents in the Charlotte area. Both of these groups are working to formulate plans for the organization, focus, and community integration of the proposed School of Public Health.

In order to achieve School of Public Health accreditation, the School must offer a minimum of three doctoral degrees in public health. The proposed Ph.D. is designed and fully aligned with CEPH accreditation standards that will advance the goal of an accredited SPH at UNC Charlotte. Further, the Public Health Advisory Board, which provides community input to the Department's degree

planning, has enthusiastically supported this doctoral program (see Appendix A5 – PH Advisory Board Letter of Support).

3. Responsiveness to local, regional, or statewide needs

We can also expect that the existing public workforce will need continuing education opportunities as more and more health departments participate in agency accreditation requiring them to meet particular competencies and to stay current within their field (Baker & Stevens, 2007). The Robert Wood Johnson Foundation is launching a national public health accreditation program in 2011 (De Milto, 2010). North Carolina has started its own initiative to accredit its local health departments as part of the North Carolina Public Health Improvement Plan (North Carolina Public Health Task Force, 2005). We envision that we will need more schools of public health in order to expand capacity (Association of Schools of Public Health (ASPH), 2008), which will necessitate more workers who are doctorally trained in public health and the behavioral sciences.

We have been responsive to the community in the curriculum design. Community public health practitioners were vocal in asking for doctoral students who could conduct focus groups and other qualitative projects on “real world issues” using rigorous methods that would be suitable for publication. Our two-course, qualitative sequence where students partner with community agencies to conduct a research project is in direct response to this request. We have solid working partnerships with several surrounding county health departments. These agencies participate on our advisory board; the PHS department consults for them; and we have placed student interns and alumni at many of these agencies. These community collaborations keep the department grounded in public health practice and sensitive to the changing needs of the local region.

Given the increasingly diverse racial and ethnic population of North Carolina, the urban/rural geographic issues, and continuing health conditions that are the consequence of behaviors related to tobacco use, poor diet, and lack of physical activity, North Carolina must invest in our state’s population and establish this program if we are to have a healthy and productive work force.

4. Student demand. Discuss the extent to which students will be drawn from a pool of students not previously served by the institution

Data from the National Center for Education Statistics for 2007-2008 indicates that the number one field of study for doctoral degree graduates is “Health professions and related clinical Sciences” (National Center for Education Statistics, 2010a). Related data indicate that the number of doctoral degrees awarded has grown 38% in 10 years (National Center for Education Statistics,

2010b). Thus, we see increased demand both for doctoral degrees and more specifically doctoral degrees in the health discipline.

The Association of Schools of Public Health (ASPH) in its report of 2009 data indicated that there are now 43 accredited schools of public health (SPH) in the US, up from only two dozen, 10 years earlier (Association of Schools of Public Health, 2010). Approximately 12% of SPH graduates are in the behavioral sciences field (p. 71). There was an 8% increase in enrollment in SPH from 2008 to 2009 (p. 8), demonstrating a continuing trend with an overall 59% increase in the 10 year period. Overall, approximately 26% of SPH students are part-time. More than 6,200 students applied to an SPH doctoral program in 2009.

These increases are further supported by the growth in applications for UNC Charlotte's BSPH and MSPH programs. Since our accreditation, applications for admission have doubled and the applicant pool has become much more academically competitive (e.g. combined verbal and quantitative GRE scores have increased by almost 100 points in just two years). Among our MSPH graduates (70 as of Summer 2012), 16% have gone on to health-related doctoral degree programs; one-third of these are specifically community health and/or behavioral in their focus. There has also been an increase in qualified applicants to the College's Health Service Research Ph.D. program, suggesting demand for health-related doctoral training.

5. Employment opportunities

Estimates suggest that by 2020, the US will face a shortage of 250,000 public health workers (Association of Schools of Public Health (ASPH), 2008). This expected shortfall is the result of several trends: 1) an existing shortfall in the public health workforce; 2) expected retirement of baby boomer public health workers; 3) increasing needs of a growing elderly and diverse population; and 4) a lack of capacity among current public health education providers. The Bureau of Labor Statistics (Bureau of Labor Statistics, 2013) also indicates that the 2010-2020 job outlook for health educators is expected to grow by 37% during the 10 year period, which is much higher than the average for all occupations. Thus we will need more public health workers and people to educate and train them.

Academic and research jobs opportunities in the field of public health and health research requiring Ph.D. level expertise are robust. The Bureau of Labor Statistics (2013) estimates a 17% job growth rate during the 2010-2020 time period for postsecondary teachers of all kinds (including community colleges, vocational schools, and public and private colleges and universities) and in all subjects. The most recent employment statistics for doctorate recipients with science, engineering and health-related degrees are from 2008 (National Science Board, 2012). These data indicate that the unemployment rate of individuals receiving a

doctorate in a health-related area in the previous 3 years was 1.2%. There are no data reported for health-related doctoral recipients that are employed in a job unrelated to their field of study because no job was available. However, the average involuntary out-of-field rate for science, engineering and health doctorates was 1.3% in 2008, suggesting that approximately 2.5% of health-related doctoral recipients are not working or not working in their field of training.

Evidence of the need for doctoral trained personnel can be garnered also from the experience of recent North Carolina graduates with health-related doctorates. Of the 17 graduates of the Health Services Research Ph.D. program (HSR) offered in the College of Health and Human Services, 76% have academic positions, with ten in teaching or tenure-track positions and three holding post-doctoral fellowships. Another two are working in public health-related jobs: one is a senior analyst at the Centers for Disease Control and Prevention and another is Executive Director of a non-profit organization. Additional data for demand for Ph.D. graduates includes the experiences of Dr. Earp, Chair of UNC Chapel Hill's Health Behavior and Health Education Department, who stated in her letter "*We have a very good track record of placing our trainees in prestigious post-doctoral fellowships, tenure-track faculty appointments, or as senior scientists in government agencies (CDC, WHO, NCI) or contract houses (FHI, RTI International, SciMetrica, etc.).*" These data suggest strong demand for doctoral-trained public health researchers and academicians. The professional success of graduates from these two programs serves as a good indicator of the potential for employment of doctoral prepared graduates of the proposed new degree.

We contacted the Council for Education in Public Health to obtain recent employment statistics from other social and behavioral Ph.D. programs. We obtained the recent CEPH self study documents (2011-2012) from three programs with similar Ph.D. degrees: Emory University, University of Iowa and the University of Michigan. The reporting of graduate employment rates are required by CEPH but most schools combine master's level graduates and doctoral level graduates together. For 2008-2009, rates of master's and doctoral graduates who were employed and/or pursuing further education were 91% to 99%. For 2009-2010, rates were 95% to 98%. For 2010-2011, the University of Michigan reported a 97% employment rate and Emory University reported a 92% rate at six months post-graduation. University of Iowa data were not available. On average across the 3 year period, an additional 2-5% of graduates were not seeking work or pursuing education, leaving a true unemployment rate of 1-3% among these schools. While these data are not specific for doctorally trained graduates, they suggest substantial demand for graduate level skills in behavioral health within the field. Doctoral preparation is needed to educate this workforce and to participate in the workforce.

These specific data from UNC system schools and from other schools around the country are consistent with the ASPH's projection that Schools of Public Health are needing to increase their number of graduates three-fold; the number of Schools of Public Health has been rapidly increasing and provides yet another indication of the need for our program graduates. More doctoral-trained faculty will be needed to staff these graduate level programs. Recent query (11/6/2012) of the American Public Health Association's "Career Mart" resulted in 171 position vacancies in response to the key word of "professor." According to the Association of Academic Health Centers (Moskowitz, 2007), the need for faculty within public health schools is a critical issue with 55% of school of public health directors citing faculty shortages as a concern. As the need for public health professionals grows, so too must faculty ranks grow to prepare this workforce. Equally clear, although impossible to quantify, is the increasing need for more doctoral trained researchers to meet the new demands resulting from the rapidly changing dynamics of providing for a healthy population using affordable approaches.

- B. Discuss potential program duplication and program competitiveness.**
- 1. Identify similar programs offered by public and private universities elsewhere in North Carolina. Indicate how the proposed new degree program differs from other programs like it within UNC. If the program duplicates other UNC programs, explain:**
 - a) why is it necessary or justified and**
 - b) how all or portions of the curriculum might be offered collaboratively with another UNC institution.**

North Carolina has two doctoral programs with related themes: the Dr.PH. in Community Health Education at UNC Greensboro (93 miles away) and the Ph.D. in Health Behavior and Health Education (HBHE) at UNC Chapel Hill (150 miles away). The proposed Ph.D. is designed to capitalize on UNC Charlotte's urban location, our long history of collaboration with Carolinas HealthCare System, and other established relationships with local providers and community agencies. Within this regional framework and setting, the PHS Ph.D. will share similar content domains that span all doctoral degrees: the relevant theories of the discipline, the basic and advanced research methods for the field, and standards of the profession, including professional conduct. Within the public health core discipline of social and behavioral sciences, doctoral programs will have overlap within domains and in the specific content that is taught. The HBHE program at UNC Chapel Hill is a highly rated, competitive, well-established doctoral program within the public health field. It is rigorous and comprehensive. As such, we would be doing our potential students a disservice if the proposed PhD did not

include many of the same elements as Chapel Hill's flagship program as well as content from other elite programs. It is not possible for us to create a completely unique doctoral program from HBHE. This would suggest that the HBHE program was deficient or not comprehensive, which is not the case.

UNC Chapel Hill's Ph.D. program in Health Behavior and Health Education is a 46 credit, post-master's degree with a minimum of three dissertation hours required. Students also complete 730 practica hours that do not count toward the 46 course credits. Students must register for a minimum three dissertation credit hours in any semester when working on their dissertation. No minimum hours are specified for dissertation research beyond the three credits/semester. Average dissertation hours completed are 12-18. Students also register for a one credit professional development seminar. Extensive professional development training is delivered through structured seminars and experiential training. The HBHE degree trains doctoral students to conduct theory-guided research on health-related behaviors that contribute to critical public health problems, as well as to conduct research on development, evaluation, and dissemination of interventions to ameliorate those problems. The program focuses on 4 competency areas: theoretical foundations, research methods, intervention research, and professional development. These four competency areas encompass 18 specific skills.

The proposed Ph.D. has some overlap of content with HBHE, but places a greater emphasis on research into theory development and advancement as it relates to social determinants affecting health with particular attention to concept measurement and scale development. An example of this type of research includes furthering our understanding of how societal notions of masculinity and femininity influence health decision-making, conducting formative research to understand these concepts, developing and testing measures to assess these gendered concepts, and applying the measures to understand their relationship to health. Our students will complete 45 credits, post-master's plus 18 dissertation research hours (63 total). Within the 45 credits, our students will take a 3 course (9 credits total) sequence of professional seminars to provide them with the required skills in teaching, writing and research that will prepare them for either academia or research careers. Practical experience working with community agencies on research projects is incorporated into the two course qualitative methods sequence (HLTH 8121 and HLTH8122). The proposed PhD has 8 competency areas (see Appendix A10 for a complete list of the 56 individual competency skills): possess substantive knowledge of the field; think theoretically and critically; frame significant research questions; establish research partnerships with the community and other researchers; design research; collect and analyze data; communicate with various audiences about research; model professional and ethical conduct.

The difference between any two programs will be related to balance and emphasis. Programs will differ based on the mix and intensity of classroom

instruction versus field instruction. Emphasis will vary depending upon whether certain courses are required versus elective, the structure of the field experience, and opportunities to conduct and disseminate research. Geographical differences will play a role in students' exposure to rural and urban populations and the health issues unique to them. Programs also have different approaches to mentoring, apprenticeship, and socialization to the profession.

There are several key areas that differentiate the proposed Ph.D. from HBHE and from health-related doctoral programs at UNC Charlotte. We emphasize qualitative research methods through a required two course sequence. The PHS curriculum includes required projects that focus on primary data collection, data management and analysis as well as the use of secondary datasets; an emphasis on primary data collection makes us complementary to the HSR Ph.D. program. The curricular emphasis on scale development and measurement helps to bridge the gap between the conceptual understanding we gain from qualitative research and its application to large-scale population surveys. We require training in how to teach at the post-secondary level for all Ph.D. students. The PHS curriculum includes required substantive coursework related to issues of professional development and ethics as it relates to teaching, research, and professional and community service. The HBHE Ph.D. program includes the previously mentioned elements but to a lesser degree, or they are elective not required courses. Further, HBHE conceptual and theoretical content has a global and philosophical focus aligned with the global/international nature of the Gillings School of Public Health. Our conceptual emphasis is less broad and sweeping but goes into more depth on specific social determinants within the US. We view the training focus of our program as being more "upstream" in the research process with less focus on specific behavioral interventions to improve health and more focus on improving our understanding and measurement of the social determinants that influence health.

In contrast, UNC Greensboro (UNCG) offers a professional degree, the Dr.PH. in Community Health Education. In terms of public health accreditation, the Dr.PH. is considered a practice-oriented degree, with less emphasis on developing a specific expertise, as is the focus of an academic degree. This degree is a 72 credit hour, post-master's program. UNCG focuses on training students to conduct translational research related to health determinants and to work intensively with community-based partners.

The proposed Ph.D., in keeping with the focus of academic degrees, has less emphasis on practice and greater emphasis on developing expertise in a particular area of research. The Ph.D. in PHS, with a concentration in behavioral science contains a stronger research basis as it relates to social and behavioral theory, and encourages students to develop a focused theoretical concentration through course work and research on a particular target population, area of theory, or theory measurement. For example, students interested in health disparities related to

immigrants develop a concentration on immigrant health and focus on theories related to migration, culture and acculturation, and the measurement of those constructs. The emphasis on development and extension of social and behavioral theory is especially critical given the lifestyle behaviors that underpin many of Americans' chronic health problems. These individual lifestyle behaviors are difficult to change without also addressing the social context and physical environment that interact of make behavior change difficult.

Further, our curriculum contains specific required courses to train doctoral students on those skills that they will need to be successful in an academic environment such as teaching and academic ethics. These skills are taught in conjunction with research skills: conducting, publishing, and disseminating research; and promoting ethical conduct in a research environment. While many doctoral students enter a program with a strong desire to focus on either an academic or research career, we recognize that graduates often find themselves in the other career path; thus it is our goal to cross-train students to be strong researchers who are also skilled teachers.

Given the uniqueness of our program, students at other UNC institutions may wish to enroll in some of our classes. Similarly, the opportunity for instructional collaboration with our sister UNC institutions will add further diversity to our program. Under terms of our existing inter-institutional agreement (per the UNC Charlotte Graduate School Catalog), our students may enroll in courses from UNC Greensboro and UNC Chapel Hill (the agreement also includes North Carolina State University, Duke University and NC Central University). Our students can enroll in up to two courses in a participating institution in the fall semester and/or spring semester, and one course per summer session, provided they are also enrolled for the balance of a normal load at UNC Charlotte.

Because the proposed PhD program is complementary to, rather than redundant with, those now at UNC Greensboro and UNC Chapel Hill, we do not anticipate students regularly taking courses outside the UNC Charlotte campus. However, a few students may have sufficiently broad interests to benefit from courses delivered at one or both of these other institutions.

Students may enroll in a total of nine hours of credit to meet their specialty content area with the consent of their advisors and the PhD Program Director. As an illustration of this opportunity, Table 1 presents graduate level courses offered last year at UNC Greensboro showing the availability of seats for additional students. Table 2 indicates courses projected to be offered at UNC Charlotte of potential interest to UNC Greensboro students. We have tentatively discussed formalizing an arrangement with Daniel Bibeau, Chair of the Department of

Public Health Education at UNC Greensboro, who has been supportive of our proposal.

Table 1. Graduate courses in public health showing additional student capacity at UNCG, 2011-2012.*

Course	Title	Term	Student capacity	Enrollment
HEA 602-01	Epidemiology	Fall 2011	40	19
<i>HEA 609-01</i>	<i>Community Health Interventions</i>	<i>Fall 2011</i>	<i>40</i>	<i>34</i>
HEA 612-01	Management of Community Health	Fall 2011	30	22
<i>HEA 622-01</i>	<i>Social Epidemiology</i>	<i>Fall 2011</i>	<i>30</i>	<i>9</i>
HEA 645-01	Health Policy	Fall 2011	40	22
<i>HEA 670-01</i>	<i>Adolescent Health</i>	<i>Fall 2011</i>	<i>20</i>	<i>3</i>
<i>HEA 701-01</i>	<i>Prom/Prctc Hlth thru Entrprshp</i>	<i>Fall 2011</i>	<i>10</i>	<i>6</i>
HEA 735-01	Topics in Community Health Research	Fall 2011	5	5
HEA 752-01	Quantitative Methods Public Health	Fall 2011	20	7
<i>HEA 758-01</i>	<i>Advanced Theoretical Basis Community Health Education</i>	<i>Fall 2011</i>	<i>10</i>	<i>4</i>
<i>HEA 765-01</i>	<i>Advanced Program Evaluation of Public Health Education</i>	<i>Fall 2011</i>	<i>5</i>	<i>4</i>
<i>HEA 601-01</i>	<i>Principles of Community Health Education</i>	<i>Spring 2012</i>	<i>45</i>	<i>25</i>
HEA 603-01	Community Health Analysis	Spring 2012	40	25
HEA 604-01	Public Health Statistics	Spring 2012	40	28
HEA 608-01	Environmental Health	Spring 2012	40	21
HEA 625-01	Community Health Education Program Evaluation	Spring 2012	30	27
HEA 648-01	Applied Program Planning	Spring 2012	30	23
HEA 711-01	ExpCr: Grant Writing	Spring 2012	0	0
HEA 711-02	ExpCr: Grant Writing	Spring 2012	20	14
HEA 753-01	Qualitative Methods Public Health	Spring 2012	10	7
<i>HEA 759-01</i>	<i>Community-Based Health Education Research</i>	<i>Spring 2012</i>	<i>10</i>	<i>11</i>

*Courses in areas not delivered at UNC Charlotte are shown in italics.

Table 2. UNC Charlotte Proposed PhD in Public Health Sciences courses open to UNC Greensboro students.

Course	Title	Term	Student capacity	Projected Enrollment
HLTH8201	Intro. To Quantitative Research Design	Fall 2014	25	10
HLTH8281/6281	Measurement and Scale Development	Spring 2016	25	15
HLTH8282	Health Survey Design and Research	Spring 2016	25	15
HLTH8220	Theories and Interventions in Behavioral Science	Spring 2015	20	12
HLTH8223	Social Determinants of Health	Fall 2014	20	15
HLTH8601	Ethics in the Public Health Profession	Fall 2014	25	15
HLTH8602	Communicating and Disseminating Research	Fall 2016	25	15

It should be noted that neither of these two existing programs or the proposed doctoral degree were designed to be inter-institutional. Students may encounter additional hurdles when maneuvering within multiple academic institutions. When students are operating within a dual environment, which would require them to engage in increased travel, adapt to different online learning systems, potentially to have a reduced sense of having a “cohort” for social support, and insufficient immersion in a geographic community or an academic home, these additional logistics may hinder students from completing their degree. Substantial and intensive effort must be invested in doctoral students so that they complete their coursework and dissertation in a timely manner and with sufficient scholarly products to obtain employment. Decisions to take courses outside of UNC Charlotte will need to be evaluated by the student, the student’s advisor, and the PhD Program Director. Given the increased emphasis on performance metrics for schools in the UNC system, we want to deliver an effective program where students can be successful within the stated time to graduation.

- 2. If the program is a first professional or doctoral degree, compare it with other similar programs in public and private universities in North Carolina, in the region, and in the nation. Where appropriate, describe how all licensure or professional accreditation standards will be met, including required practica, internships, and supervised clinical experiences.**

For an additional comparison, we examined Ph.D. programs in the southeast region with similar content to evaluate the consistency of the curriculum balance. The eight schools include: Virginia Commonwealth University, the University of South Carolina, the University of Georgia, Emory University, Georgia Southern University, Florida International University, the University of Louisville, and East Tennessee State (underlined schools are CEPH accredited). Our curriculum is consistent with these schools in terms of the proportion of methods courses, behavioral courses and specialized concentration credits. Additionally, our curriculum is consistent in terms of the ratio of methods courses to behavioral courses to specialized concentration credits. Further, our curriculum places an emphasis on professional development to better prepare students for their role in academia as a researcher and educator.

In order to accelerate the accreditation process for the Ph.D., the proposed curriculum is based on a competency model designed to train academics for behavioral science research. These competencies are required for accreditation by CEPH, our accrediting agency.

C. Enrollment (baccalaureate programs should include only upper division majors, juniors and seniors).

Headcount enrollment

Show a four-year history of enrollments and degrees awarded in similar programs offered at other UNC institutions (using the format below for each institution with a similar program); indicate which of these institutions you consulted regarding their experience with student demand and (in the case of professional programs) job placement. Indicate how their experiences influenced your enrollment projections.

Institution: University of North Carolina – Chapel Hill _____
 Program Title: Ph.D. in Health Behavior and Health Education _____

	2007	2008	2009	2010*
Enrollment	46	44	37	39
Degrees-awarded	5	7	14	4

*only partial data available

Institution: University of North Carolina – Greensboro† _____
 Program Title: Dr.PH in Community Health Education _____

	2007-08	2008-09	2009-10	2010-11
Enrollment	10	14	20	20
Degrees-awarded	-	-	4	2

†UNC Greensboro Dr.PH started in AY 2006-2007.

For our enrollment projections, we were mindful of both resource constraints and a desire for limited growth in order to be flexible the first few years of the program. We based our enrollment estimates on programs that are newly established such as UNC Greensboro as a guide for what our early growth would most likely replicate. We also consulted other recently established doctoral programs on the UNC Charlotte campus (Ph.D. degrees in Health Psychology, Health Services Research, Organizational Science, and Public Policy) as to their experiences with admissions, enrollment, funding levels, mentoring, and faculty resources. These enrollment numbers are the minimum number of expected full-time students. The admission of additional qualified students is feasible pending funding for graduate assistantships, availability of faculty members to serve as mentors and dissertation Chairs, and appropriate matching of student and faculty interests. Qualified part-time students will be considered for admission based on the stated admission criteria, student goals, program fit, and flexibility of the student’s schedule. Estimates for part-time students have not been included in the enrollment numbers.

Please indicate the anticipated first year and fourth year steady-state enrollment (head count) for the proposed program.

Year 1: Full Time ___6___ Part-time ___0___ Total ___6___

Year 4: Full-time ___21___ Part-time ___0___ Total ___21___

Note: In Year 4, we start with 27 full-time students, but we anticipate 6 students graduating mid-year.

III. Program Requirements and Curriculum

A. Program Planning

- 1. List the names of institutions with similar offerings regarded as high quality programs by the developers of the proposed program.**

We reviewed the top academic programs (Ph.D.) in public health that focus on theory and theory-related research as it relates to behavioral science using the social-ecological framework. These programs include a focus on culture and health disparities, emphasis on theoretical models that encompass more than just the standard behavior change theories, and an acknowledgement of the importance of qualitative research and a mixed method approach.

- Emory University, Rollins School of Public Health – Ph.D. in Behavioral Sciences and Health Education
- Johns Hopkins, Bloomberg School of Public Health – Ph.D. in Social and Behavioral Sciences
- University of Michigan, School of Public Health – Ph.D. in Health Behavior and Health Education
- University of Iowa, College of Public Health – Ph.D. in Community and Behavioral Health
- University of California Los Angeles, School of Public Health – Ph.D. in Community Health Sciences

- 2. List other institutions visited or consulted in developing this proposal. Also discuss or append any consultants' reports, committee findings, and simulations (cost, enrollment shift, induced course load matrix, etc.) generated in planning the proposed program.**

In the course of planning the Ph.D. in Public Health Sciences we consulted with multiple constituents on and off campus. Within UNC Charlotte we met with several Directors of related Ph.D. programs (including interdepartment and intradisciplinary programs), all of which are relatively new in the degree life cycle (begun in the last 5-7 years). We gathered insight into “lessons learned” regarding program organization and administration, funding levels required, recruitment and enrollment of students, chairing of dissertation committees and other important details related to the planning and implementation of a doctoral degree program.

During the planning phase, we obtained external consultancy reports from academics at other schools of public health as to the need, scope and feasibility of the proposed Ph.D. (Drs. Robert Lawrence, Marcia Ory and Bernard Turnock). This proposal was reviewed by Dr. John Graham from the North Carolina Institute of Public Health (see Appendix 5 for letter of support).

We also consulted our Community Public Health Advisory Board for its input on the competencies proposed for the doctoral program as well as how doctoral students should work with the community. The Advisory Board placed emphasis on having doctoral students develop working partnerships with community agencies to further solidify ties between the program and the community and to have students experience the research needs of community agencies.

In Fall 2011, our planning team consulted with the other related doctoral programs in the UNC system at Greensboro (9/30/11) and Chapel Hill (9/23/11). These conversations were fruitful in helping us anticipate and plan for issues that we would encounter in launching and sustaining the proposed doctoral degree. UNCG administrators provided insights related to the establishment of a new PH doctoral program and described some of the “growing pains” they have encountered in relation to retaining students, encouraging student scholarship, and progressing students to graduation on a timely schedule. On the other end of the program lifecycle continuum, UNC Chapel Hill administrators provided important advice on implementing early student advising; the level of research funding required to ensure student funding and assistantships and maintain a high quality, growing program with a national reputation; and the importance of a rigorous comprehensive exam to determine doctoral candidacy.

We paid special heed to the comments from the Interdisciplinary panel members who reviewed the previous Request to Plan a Doctoral Program document. In particular, panel members identified the need for PHS department faculty to raise their research profile. PHS faculty members have increased their research productivity in two important ways. One, faculty have increased the quantity and quality of peer-reviewed publications in high impact journals (see Appendix A7 for summary table of faculty experience). This effort has served to increase the visibility of the faculty to prospective students and to other scholars. Two, faculty members have increased the number of research grant proposals submitted and the overall dollar amount. In 2008-2009 we submitted 10 proposals for approximately \$6.4 million and in AY 2010 we submitted 16 proposals requesting \$10.9 million. This year in response to faculty needs we also increased our available resources to help faculty write grants by contracting the services of Elizabeth Tornquist, MA, FAAN to provide grant reviews. Ms. Tornquist is a grant and manuscript editor at UNC Chapel Hill School of Nursing. She has over 30 years experience editing NIH and other health-related grant proposals. Further, the department has established an ad hoc grant review committee of three senior faculty with a grant funding history to help faculty colleagues develop grant ideas and review grant submissions.

We believe that we have been responsive to the concerns raised by our colleagues within the UNC system.

B. Admission. List the following:

1. Admissions requirements for proposed program (indicate minimum requirements and general requirements).

The minimum admission requirements for the program are as follows:

- a) Master's degree in public health or a related field with a minimum GPA of 3.5 (A=4.0) in all graduate work.
- b) Competitive GRE scores.
- c) Minimum score of 83 (Internet based), 220 (computer-based test) or 557 (paper-based test) on the TOEFL if the previous degree was from a country where English is not the official language.
- d) A statement of purpose in which the applicant details why she/he wants to pursue a Ph.D. in Public Health Sciences with a concentration in *Behavioral Sciences* at UNC Charlotte.
- e) Three letters of recommendation; at least two letters from former professors familiar with the applicant's graduate work.
- f) Students who have not completed a CEPH accredited Master's degree in public health may be required to take additional courses as determined by the Ph.D. Review Committee upon review of current CEPH requirements. Such courses will be specified at the time of admission into the program.

2. Documents to be submitted for admission (listing or sample).

- Official transcripts from all colleges or universities attended.
- Official GRE scores (verbal, quantitative and analytical), no more than five years old.
- UNC Charlotte application for graduate admission.
- Three letters of recommendation; at least two letters must be from former professors familiar with the applicant's graduate work.
- A statement of purpose from the applicant explaining why they want to pursue the study of Public Health Sciences with a concentration in *Behavioral Sciences* in general and at UNC Charlotte in particular. The statement should include the student's professional goals.
- TOEFL scores (if the student is not a native English speaker) of at least 557 on the written test or 220 on the computer-based test.
- Current resume or curriculum vitae.
- In-person or telephone interview with a Program faculty member.

C. Degree Requirements. List the following:

1. Total hours required. State requirements for Major, Minor, General Education, etc.

63 post-master's, semester credit hours. These credits consist of: 24 credits hours of core Public Health courses in methods and professional seminars; 12 credit hour concentration in Behavioral science; 9 credit hours of specialty content courses based on the student's interest (e.g. gerontology or women's health); and 18 credits hours of dissertation research.

2. Other requirements (e.g. residence, comprehensive exams, thesis, dissertation, clinical or field experience, "second major," etc.).

- Students must take and pass a comprehensive exam upon completion of required course work.
- Students must complete a scientifically rigorous project culminating in a written dissertation.
- All students must complete a residency requirement of at least 21 credit hours over successive terms of enrollment.

3. Proportion of courses open only to graduate students to be required in program (graduate programs only).

100 percent

4. Grades required.

Each student must maintain a cumulative grade average of 3.0 in all courses. An accumulation of two C grades in graduate course work will result in academic suspension of enrollment in the graduate program. If a student receives a grade of U (unsatisfactory) or N (no credit) in any graduate course, enrollment will be terminated. A grade of N is only possible for courses graded on the pass/no credit scale.

5. Amount of transfer credit accepted.

The UNC Charlotte Graduate School stipulates that students may transfer up to 30 graduate level credits from a regionally accredited university toward a doctoral degree. This Ph.D. program limits master's level transfer credits to at most six credits. Master's level transfer credits will be considered only toward Specialty Content courses, the Ethics Seminar (HLTH 8601/6361), and the Measurement course (HLTH8281/6281). The Ph.D. Program Director, in conjunction with Program Faculty, approves graduate level transfer credits. Students must apply for transfer of

graduate level courses within the first year of enrollment, or within one semester following completion of the course if taken during the Ph.D. program. Only courses in which the student earned a grade of “B” or better (or its equivalent) may be transferred.

Students transferring from another doctoral program can transfer up to 30 credits (with not more than 6 at the master’s level) upon approval of the Ph.D. Program Director. Credit for dissertation research cannot be transferred.

Courses taken to fulfill the master’s level prerequisite public health courses do not count toward the 63 credit total.

6. Language and/or research requirements.

There is no foreign language requirement.

Students must complete a dissertation, in the form of an original research project conceived, conducted, analyzed, and interpreted by the student to demonstrate expertise in her/his concentration and chosen specialty area as it relates to public health. The research must make a distinct, original contribution to the field of public health research.

7. Any time limits for completion.

- Students must pass all sections of the comprehensive exam within one year of finishing their required course work.
- Students may not defend their dissertation proposal before passing all components of the comprehensive exam.
- Students must pass their dissertation proposal defense within six months of passing the comprehensive exam.
- Students must pass their dissertation defense within five years of the proposal defense, but no later than the end of their 8th year following matriculation as a doctoral student.
- Students must complete their degree, including the dissertation, within eight years of first registering as a doctoral student.

D. For all programs, list existing courses by title and number and indicate (*) those that are required. Include an explanation of numbering system. List (under a heading marked “new”) and describe new courses proposed.

Courses in the PHS department are numbered according to the following schema. Briefly, all doctoral classes are at the 8000 level. Specific digits in the second column designate a specific content focus such as one of the five core areas of public health, or types of training experiences that result in academic credit.

Number	Description	Type
8000-8099	Special topics	No prerequisites
8100-8199	Electives	No prerequisites
8200-8219	Public Health core	
8220-8259	Social and Behavioral	
8260-8299	Quantitative methods	Including epidemiology and biostatistics
8300-8329	Administration	
8330-8359	Environmental health	
8360-8399	Electives & cross-cutting areas	E.g. Maternal & child health, with prerequisites
8400	Internships	
8600	Seminars	
8800	Tutorials	
8900	Dissertation/residency	

Existing courses:

These are existing MSPH master's level courses or doctoral level courses in the Health Services Research Ph.D. program that will be cross-listed. Required courses for the Ph.D. in Public Health Sciences are marked with an asterisk (*).

***HLTH 8201/HSRD 8101. Introduction to Quantitative Research Design. (3)**

Pre/Co-requisites: none. This course provides an overview of quantitative methods as applied to design and analysis of public health and health services research problems. Topics include: categories and levels of quantitative research, characteristics of a good research design, relationship between theory and research, selection process for measurement tools, power analysis, sampling techniques, design sensitivity, and human subjects protection. An overview of qualitative research methods and their relationship to quantitative methods also are provided.
(Fall)

HLTH 8260/HSRD 8003. Analytic Epidemiology. (3)

Pre- or co-requisite: a graduate introductory course in Epidemiology such as HLTH 6202, Community Epidemiology, or HADM 6104, Health and Disease. Principles and methods of studying advanced epidemiology, with emphasis on the analytic approach. Includes: advanced techniques in the establishment of disease causation in groups and communities. Such topics a risk assessment, environmental exposures, stratification and adjustment, and multivariate analysis in epidemiology are covered. Emphasis is also placed on quality assurance and control and communicating results of epidemiological studies in professional publications and settings.
(Alternate Fall)

***HLTH 8270/HSRD 8110. Applied Biostatistics: Regression. (3)**

Prerequisites: Graduate level Introduction to Biostatistics or approved Statistics course; basic

knowledge of statistical software; or permission of the instructor. To understand and apply concepts and principles of regression based statistical methods (regression, linear models, logistic regression, Poisson regression) to health related studies. Selection of appropriate methods for analysis, development of skills to conduct the analysis of the data and capability to write in scientific language the results of the study will be studied. (*Spring*)

***HLTH 8271/HSRD 8111. Applied Biostatistics: Multivariate Methods. (3)**

Prerequisites: HLTH 8270/STAT 8110/HSRD 8110, Applied Biostatistics: Regression; or permission of the instructor. Includes study of the concepts, principles and statistical methods of analysis of discrete and continuous multivariate data. Students will learn to use the most popular methods of multivariate data reduction, classification and clustering such as principal components, factor analysis and canonical correlation analysis. Design issues, verification of the assumptions and interpretation of the results will be discussed. Skills for concise presentation of the results of statistical analysis will be developed. (*Fall*)

HLTH 8273/HSRD 8103. Large Data Sets and Health Services Research. (3)

Prerequisite: HLTH 8271/STAT 8111/HSRD 8111, Applied Biostatistics: Multivariate Methods, and HSRD 8102, Advanced Design of Health Services Research. Health quality and outcomes issues addressed through secondary data analysis using large, public data sets will be examined. Issues related to secondary analysis and drawing items from multiple data sets will be discussed. Analytical techniques such as adjustments for missing data, transformations of data, and risk adjustment will be applied using public data sets. Open only to students admitted to the Ph.D. in Health Services Research or the Ph.D. in Public Health Sciences program or permission of the instructor. (*Spring*)

***HLTH 8281/6281. Measurement and Scale Development. (3)**

Prerequisites: HLTH 8201. This course covers the conceptual aspects of quantitative measurement in the public health sciences and the practical aspects of the scale development process as applied to individual and population health status and behavioral and social determinant assessment. Students will progress from a conceptual model of the health phenomenon under consideration to item development, response scaling, item selection, and scale development through reliability and validity testing. Students will develop a framework for judging the appropriateness of a measure for a given situation. (*Alternate Spring*)

New courses.

HLTH 6200 Introduction to Public Health. (3)

Pre/Co-requisites: none. An introduction and historical background to the diverse profession of public health, this course emphasizes the development of a conceptual model of public health and exposure to the essential skills in critical thinking and group process skills needed in public health practice. Students will complete an analysis of a current public health problem, including recommended courses of action to policy makers. (*Fall/Summer*). NOTE: This course is needed at the master's level as a required prerequisite for students entering the doctoral program who do not have a master's degree in public health.

***HLTH 8220. Theories and Interventions in Behavioral Science. (3)**

Pre/Co-requisites: none. This course provides a broad overview of theories that influence health behavior and health outcomes using the social-ecological model as a guiding framework. The focus of the course is less on learning specific theories, and more on how to apply theories in a health intervention. Students will read a variety of articles related to intervention research and identify issues that could form potential avenues of theoretical and intervention inquiry. The major emphasis is on designing a health behavior intervention using theory and writing a complete grant proposal detailing the intervention. (*Spring*)

***HLTH 8221. Theory Generation in Behavioral Sciences. (3)**

Pre/Co-requisites: none. Introduction to research designs and data generation techniques that lead to theory generation and identification of theoretical concepts. Students will learn the philosophical basis of qualitative research, the basic qualitative research designs and their uses, gain an understanding of qualitative research elements that must be addressed in a research project, and the importance of research rigor. Students will perform multiple field projects to gain practical experience with conducting qualitative research that leads to theory generation. Student will work in small groups partnered with a community agency to generate qualitative data to answer a “real world” research question. This same data will then be analyzed and presented back to the community agency during the follow on course, HLTH 8222. (*Fall*)

***HLTH 8222. Theory Generation and Analysis in Behavioral Sciences. (3)**

Prerequisite: HLTH 8221. Using data collected in HLTH8221, students will work in teams to analyze data from various techniques and perspectives including grounded theory to develop robust and bounded concepts. The focus is on analyzing and writing qualitative research to contribute to theory development. Students will learn how to write a qualitative article for publication. Additional assignments include: developing a code book, analyzing text data using grounded theory techniques of constant comparison, presenting findings back to your community partner agency, and writing a qualitative methods section of a research manuscript. (*Spring*)

***HLTH 8223. Social Determinants of Health. (3)**

Pre/Co-requisites: none. This course covers the major social determinants of health using the social-ecological model as a guiding framework. We will focus on how differences in levels of these determinants contribute to health inequalities and poor health. Students will read across disciplines and international boundaries to gain a broad understanding of social determinants. Students will write a literature review paper addressing a key social determinant and how it influences health behavior and a corresponding health outcome. (*Fall*)

***HLTH 8282. Health Survey Design and Research. (3)**

Prerequisites: HLTH 8201; HLTH 8281 or HLTH 6281. This course covers the practical aspects of designing (or selecting) quantitative survey instruments related to health status assessment in individuals and populations and their use in research. Building upon prior coursework and drawing upon case studies and practical exercises, students will progress from

appropriately formulating questions (items) for a variety of domains to the design and layout of survey instruments and the development of survey protocols through the data entry, data cleaning, and analysis/reporting phases. (*Alternate Spring*)

***HLTH 8601/6361. Ethics in the Public Health Profession. (3)**

Pre/Co-requisites: none. This course examines the ethical issues facing public health professionals working in public health practice, research, teaching, and service. Topics include: ethical issues in public health program implementation, research with vulnerable populations, data falsification & fabrication, plagiarism among students, ethics of working with students, publishing ethics, human subjects research, and working with the community. (*Fall*)

***HLTH 8602. Communicating and Disseminating Research. (3)**

Pre/Co-requisites: none. This course focuses on research dissemination planning, writing for publication, grantsmanship, presenting at professional conferences, presenting to the community, writing technical reports for funders, writing abstracts, working with the media, and an introduction to the field of health communication. Students work on a variety of assignments to gain skills relating to disseminating research in different venues. (*Yearly*)

***HLTH 8603. Teaching Portfolio. (3)**

This course exposes students to teaching strategies that focus on the major aspects of university teaching. Topics to be covered include: preparing a syllabus, creating assignments, evaluating student performance, and enhancing student learning through the use of various discussion and lecture techniques. Students will work with a faculty member to develop and deliver a lecture, and develop and grade an assignment to assess students' understanding based on the delivered lecture. (*Spring*)

HLTH 8800. Independent Study in Public Health Sciences. (1-6)

Prerequisite: Full graduate standing in the Ph.D. in Public Health Sciences program and permission of instructor. Offered on a pass/fail basis only. (*on demand*)

***HLTH 8801. Dissertation Research. (1-9)**

Prerequisite: Passing the comprehensive exam and approval of the dissertation Chair. Offered on a pass/fail basis only. (*Fall, Spring, Summer*)

HLTH 9999. Doctoral Degree Graduate Residency Credit. (1)

Prerequisite: Passing the dissertation defense. This course allows students who have successfully defended their dissertation but need to make some changes to their written product before handing it in to the Graduate School to complete that work. This course does not count toward the 63 credits required for graduation. Offered on a pass/fail basis only. (*Fall, Spring, Summer*)

IV. Faculty

A. For undergraduate and Master's programs – Not Applicable

- B. (For doctoral programs) List the names, ranks, and home department of each faculty member who will be directly involved in the proposed program. The official roster forms approved by SACS may be submitted. Provide complete information on each faculty member's education, teaching experience, research experience, publications, and experience in directing student research, including the number of theses and dissertations directed.**

Program Faculty for the Ph.D. in Public Health sciences are individuals with a full-time or adjunct appointment in the Department of Public Health Sciences and who are regular members of the Graduate Faculty. Details about their training, teaching, research and mentoring experiences are summarized in Appendix A7 and followed by their biosketches.

Arrigo, Bruce, Ph.D. Criminal Justice and Criminology
Arif, Ahmed, Ph.D. Public Health Sciences
Bosley, Deborah S., D.A. English
Brandon, Bill, Ph.D. Public Policy
Harver, Andrew, Ph.D. Public Health Sciences
Huber, Larissa Brunner, Ph.D. Public Health Sciences
Laditka, James, Ph.D., D.A. Public Health Sciences
Laditka, Sarah, Ph.D. Public Health Sciences
Piper, Crystal, Ph.D. Public Health Sciences
Platonova, Elena, Ph.D. Public Health Sciences
Portwood, Sharon, Ph.D. Public Health Sciences
Racine, Elizabeth, Dr.PH. Public Health Sciences
Scheid, Teresa, Ph.D. Sociology
Studnicki, James, Ph.D. Public Health Sciences
Tong, Rosemarie, Ph.D. Philosophy
Troyer, Jennifer, Ph.D. Economics
Thompson, Michael, Dr.PH Public Health Sciences
Warren-Findlow, Jan, Ph.D. Public Health Sciences

Doctoral Affiliate Faculty are UNC Charlotte faculty members with a Graduate Faculty appointment, and a full-time appointment outside the Department with an interest in social and behavioral determinants of health. The following individuals were invited to apply, and were subsequently approved, as inaugural doctoral affiliate faculty (see Appendix A8 for details of their training and experiences followed by their biosketches).

Dee Baldwin, Ph.D., RN, FAAN Nursing
Suzanne Boyd, Ph.D. Social Work
Maren Coffman, Ph.D. Nursing
Judy Cornelius, Ph.D. Nursing
Boyd Davis, Ph.D. Applied Linguistics/English
Christine S. Davis, Ph.D. Communication Studies

Virginia Gil-Rivas, Ph.D. Psychology
Shanti Kulkarni, Ph.D. Social Work
Ross Meentemeyer, Ph.D. Geography
Amy Peterman, Ph.D. Psychology
Maggie Quinlan, Ph.D. Communication Studies
Dena Shenk, Ph.D. Anthropology/Gerontology
Laura Talbot, Ph.D., Ed.D., RN, GCNS-BC, Nursing
Lori Thomas, Ph.D. Social Work
Meredith Troutman, Ph.D. Nursing
Lisa Rashotte Walker, Ph.D. Sociology
Jennifer Webb, Ph.D. Psychology

- C. Estimate the need for new faculty for the proposed program over the first four years. If the teaching responsibilities for the proposed program will be absorbed in part or in whole by the present faculty, explain how this will be done without weakening existing programs.**

The Dean of CHHS recommends adding a total of two new faculty positions for the Ph.D. in Public Health Sciences during the first two years of the program. The rationale for this request is based on the administrative needs of the program, number of new courses that need to be offered in the Ph.D. Program, the number of existing faculty qualified and available to teach these courses, the need for additional expertise in the program and our accreditation requirements.

Administrative needs: The Ph.D. program will require a 12 month administrator (1 FTE, full-time faculty equivalent) to oversee recruitment, scheduling, advising, implementation and progress. This individual will carry a half-time (1 course per semester) teaching load.

Number of courses required: While the curriculum is designed to maximize the use of other available courses on campus, there will still be a need for additional faculty. The estimated need for new faculty positions is based on a post-master's program with a total of 63 credit hours of courses, including 18 dissertation credit hours. Assuming a full-time program of 45 credit hours of courses to be taught excluding dissertation credits (full-time option of 3 three-credit courses in each of five semesters), 1 FTE is needed to cover the teaching needs of the program in the first year. Additional faculty will be added if needed based on department need and program enrollment through the normal mechanisms for requesting faculty positions.

Expertise needed by new faculty: It is assumed that most PHS faculty members will teach in the Ph.D. program on a part-time rather than a full-time basis. Also, it is assumed that while existing faculty are likely to teach many of the courses in the proposed program, several courses will be taught by new faculty hires. This

assumption is based on the need for existing faculty to continue covering the existing master's and baccalaureate course offerings. It is also based on the need for additional expertise in the Ph.D. program. Based on an assessment of current faculty strengths and the proposed program's thematic focus, additional faculty with the following general levels of expertise are appropriate for consideration: behavior change theory, qualitative research, and epidemiology. Preference will be given to new faculty hires having the above types of expertise.

Accreditation: Our accreditation body requires us to maintain a specific faculty: student ratio (10:1 for graduate programs), thus we will need two additional faculty to sustain the strength of our existing accredited BSPH and MSPH public health programs (see Section IV.B).

D. Explain how the program will affect faculty activity, including course load, public service activity, and scholarly research.

Course load: Faculty teaching loads will continue at the current 12 semester hours per academic year (a 2-2 course load). To continue growth in our BSPH program, doctoral students will be trained on teaching skills and course development (see HLTH 8603), and then the following year will be required to be a teaching assistant or to teach an undergraduate course (with supervision). This training sequence will provide students with the necessary teaching skills, knowledge and experience to become effective in the academic environment. It also will allow the department to further leverage and rotate faculty resources so that all faculty members have the opportunity to teach in the PhD program, while they supervise doctoral students who are gaining teaching experience with undergraduate courses.

Service activity: A high level of university, professional and community service already exists within the Department consistent with our discipline and values. Internal service to the department, college and university is required by college promotion and tenure criteria. External service to the community, and within the public health profession to facilitate the peer-review process, is required by CEPH accreditation standards. We expect to continue and enhance this service level as we deepen our community engagement to extend opportunities to doctoral students. There also will be increased department service as faculty will serve on the Ph.D. Program Advisory committee, and on exam and dissertation committees. Many PHS faculty members already sit on dissertation committees for HSR, Public Policy, and Health Psychology students; thus there may be a shift as PHS faculty reduce their involvement in those programs in order to chair dissertation committees and mentor doctoral students in the PHS department.

Scholarly research: As faculty members increase their level of research funding to support doctoral student assistantships, we can anticipate that those faculty members with the most intensive funding levels will have a reduced teaching load as they "buyout" of

some of their teaching responsibilities. A reduced teaching load allows faculty to devote time to conduct their research and provide greater research mentoring for doctoral students. In the longer term, faculty will benefit from having larger funding portfolios, more doctoral students to write publications from their data, and more research trainees to help them further their research agenda. Students benefit from having multiple faculty to work with on research, more exposure to research projects and phases of research, opportunities to publish and present data, and practical experience conducting research in the field under experienced supervision.

V. LIBRARY

A. Provide a statement as to the adequacy of present library holdings for the proposed program.

Library consultations were solicited for both the feasibility study conducted in 2007 and the current proposal to establish. Current holdings as of February 1, 2011 are considered “adequate”. Students and faculty have access to all but three of the top journals across the Social Sciences, Biomedical, Public Health, Psychology, and Geriatrics and Gerontology journals. Other articles and journals may be accessed through the Interlibrary Loan Service. See Appendix A9 Library Consult Public Health Sciences Ph.D. for further details.

B. State how the library will be improved to meet new program requirements for the next five years. The explanation should discuss the need for books, periodicals, reference material, primary source material, etc. What additional library support must be added to areas supporting the proposed program?

Each college at UNC Charlotte is supported by its own library liaison. The liaison for CHHS regularly solicits input from the faculty and actively searches for materials to support existing degree programs. The materials available to support this Ph.D. program are adequate and only need to be updated or added to as new ideas emerge. The liaison also works with students and the faculty to learn how to navigate the wealth of information available and evaluate it for the best evidence.

C. Discuss the use of other institutional libraries.

Atkins Library belongs to several consortia that impact delivery of services and materials. Memberships in the Carolina Consortia and NCLIVE allow us to provide more databases to our constituents than we could if we were purchasing them individually. As part of the UNC system, we belong to the Cooperative Borrowing program that allows any students at any of the 17 schools to check out materials from all the schools. We are active in

interlibrary loan agreements (ASERL's Kudzu) that expedite delivery of materials we do not own.

VI. FACILITIES AND EQUIPMENT

A. Describe facilities available for the proposed program.

The Department of Public Health Sciences resides in CHHS. CHHS is housed in a 138,000 square foot (sf), \$34 million state-of-the-art building, which includes over 16,000 sf of office space and over 17,000 sf of laboratory space. CHHS is currently the largest classroom building on the UNC Charlotte campus. We have adequate space to accommodate the additional classes, house the proposed new faculty, and support doctoral students.

B. Describe the effect of this new program on existing facilities and indicate whether they will be adequate, both at the commencement of the program and during the next decade.

The existing facilities are adequate for the proposed doctoral program at its inception and during the next decade. However, the planned growth to a School of Public Health will likely exceed the available space and facilities.

C. Describe information technology and services available for the proposed program.

The campus has a robust data network that connects over 130 servers and more than 3000 computers. Thirty percent of the campus features wireless network access. The Department of Public Health Sciences provides faculty and staff with access to specialized research software not provided by the University, including EndNote bibliographic software, MPlus, Stat/SE and SUDAAN quantitative statistical analysis packages; NVivo and Atlas/TI qualitative analysis software; Stat/transfer data conversion software; and the Prism scientific graphing package. The University provides each faculty and staff computer with an operating system, virus and spyware detection and removal software, the Microsoft Office Professional productivity package, internet applications and browser, geographic information systems analysis software, SPSS and SAS statistical analysis packages, and extensive electronic library resources. Site licenses have been purchased to cover all users.

PHS faculty, students and staff are supported by the Office of Academic Technology group who maintain the CHHS computing and instructional environment. An instructional designer who is 75% employed with CHHS is readily available to faculty and doctoral students for consultation in online and didactic instruction. The college includes a student computing lab with 50 computers, and three computer classrooms with approximately 25 computers in each room, group study rooms, and a video-teleconferencing classroom.

D. Describe the effect of this new program on existing information technology and services and indicate whether they will be adequate, both at the commencement of the program and during the next decade.

We consulted with the CHHS Academic Technologies group that supports the computing and technical environment for the college and the department. In general, the existing hardware and software environment is adequate. However, several courses will require greater access to qualitative software and some specialized statistical software. These software packages will require site licenses, which will need to be obtained for the computer classrooms. In some cases, the access and expenses can be spread across the university, as a university license will be more cost-effective. The estimate for hardware and software needs of the proposed program are included in the Budget.

VII. ADMINISTRATION

Describe how the proposed program will be administered, giving the responsibilities of each department, division, school, or college. Explain any inter-departmental or inter-unit administrative plans. Include an organizational chart showing the "location" of the proposed new program.

A. Introduction

The proposed Ph.D. program in Public Health Sciences depends upon faculty throughout UNC Charlotte for its success. Thus, it is important that the governance structure of the program reflect the range of expected contributions from University faculty. The proposed governance structure is inclusive and representative. This structure will maximize the appropriate distribution of resources to implement a responsive and successful doctoral program in the Department of Public Health Sciences degree portfolio.

The Dean of the Graduate School is responsible for monitoring the quality of graduate programs, the final admission of graduate students, and appointment to the Graduate Faculty. The Graduate Dean acts in collaboration with the Chair of the Department of Public Health Sciences who is administratively responsible for personnel, resource allocation, evaluation, and other issues related to the administration of academic programs within the Department.

B. Program Director

The Director of the Public Health Sciences Ph.D. Program is an administrative director position appointed by the Chair. The Program Director is a 12-month administrative appointment. The Program Director provides oversight of the program and reports to the Chair of the Department of Public Health Sciences.

The Program Director:

- Meets the qualifications of a tenured, associate or full professor and is a member of the Graduate Faculty and the Program Faculty of the Ph.D. Program
- Will have a 12 month administrative appointment
- Has a half-time teaching load (1 course per semester – fall, spring and summer).

Responsibilities of the Program Director

- Chairs the Ph.D. Program Advisory Committee
- Communicates and coordinates program development and evaluation to the PHS Chair
- Oversees student recruitment efforts
- Recommends program budget needs to the PHS Chair
- Coordinates scheduling of courses
- Works with the PHS Chair to determine course instructors
- Recommends student applicants to the Graduate School for program admission
- Maintains student records in collaboration with the Associate Dean for Academic Affairs
- Assigns an advisor to entering students based upon the admissions process and faculty input
- Coordinates scheduling of dissertation defenses with chairs of dissertation committees
- Serves as the liaison to the Graduate School
- Represents the program to external professional and community constituencies
- Has teaching responsibilities as appropriate to program needs
- Works collaboratively with department, college and university faculty
- Participates and serves in department and academic governance related to graduate degree programs
- Maintains appropriate documentation for CEPH accreditation activities
- Maintains an active research agenda
- Maintains PHS Ph.D. student handbook and develops brochures and newsletters related to the program

C. PHS Program Faculty and Doctoral Affiliate Faculty

The Public Health Sciences doctoral program is delivered and administered through its program faculty. Interested university faculty may be nominated for status as *Program Faculty or Doctoral Affiliate Faculty*. Appointments to faculty status are made by the PHS Doctoral Program Advisory Committee.

Program Faculty: Criteria for Appointment and Responsibilities

Criteria for appointment to *Program Faculty* include ALL of the following:

1. Regular member of the Graduate Faculty at the University of North Carolina at Charlotte.
2. Full-time or adjunct appointment in the Department of Public Health Sciences.
3. Rank of Assistant or Associate Professor (tenure track), Associate Professor or Professor, with Tenure.
4. Expertise that is relevant to public health research, the doctoral curriculum, or the PHS doctoral program.

Responsibilities of *Program Faculty*

Program Faculty will assume leadership roles, which may include: chairing dissertation committees; chairing or membership of comprehensive exam committees; advising and mentoring students; being a member of the doctoral program committee; developing and teaching courses; mentoring dissertation committee members in successful dissertation committee membership; etc.

For further details about Dissertation committee Chairs, see the Catalog Copy.

Doctoral Affiliate Faculty: Criteria for Appointment and Responsibilities

Criteria for appointment to *Doctoral Affiliate Faculty* include ALL of the following:

1. Member of the Graduate Faculty at the University of North Carolina at Charlotte with a terminal degree.
2. Expertise that is relevant to public health research, the doctoral curriculum, or the PHS doctoral program.

Responsibilities of *Doctoral Affiliate Faculty*

Doctoral Affiliate Faculty may participate as dissertation committee members, teaching faculty in the PHS doctoral program, as a comprehensive exam committee member, or as a dissertation co-chair with Program Faculty.

*Inaugural Doctoral Affiliate Faculty were nominated by PHS department faculty members and then invited to become doctoral affiliates (see Section **IV.B**).

D. PHS Ph.D. Program Advisory Committee

The Ph.D. Program Advisory Committee will work with the Program Director to ensure the successful implementation, growth and evaluation of the degree program. The initial representatives to the Ph.D. Program Advisory Committee will be appointed by the Chair of the Department. Membership will consist of the Director, two representatives from PHS Behavioral Sciences faculty, one at-large representative from the College, one at-large representative from the wider university faculty, an alumni representative (once there are program graduates), and one student representative. All faculty members will be regular members of the Graduate Faculty. The committee will assist the Program Director in administering the Ph.D. program to ensure a program of the highest quality. The length of terms of committee members will be staggered. Once established, each member will serve a two-year term.

The PHS Ph.D. Program Advisory Committee:

- Serves as the Curriculum Committee for the Ph.D. program in PHS
- Reviews and recommends to the Director, student applicants to the program, in consultation with department faculty
- Reviews applicants for appointment of faculty members as Program Faculty
- Assures that the Comprehensive Examination is administered properly and fairly for all students enrolled in the program
- Determines that program requirements are completed by each student
- Monitors student progress through the program to ensure successful completion
- Coordinates the evaluation of the program and student outcomes

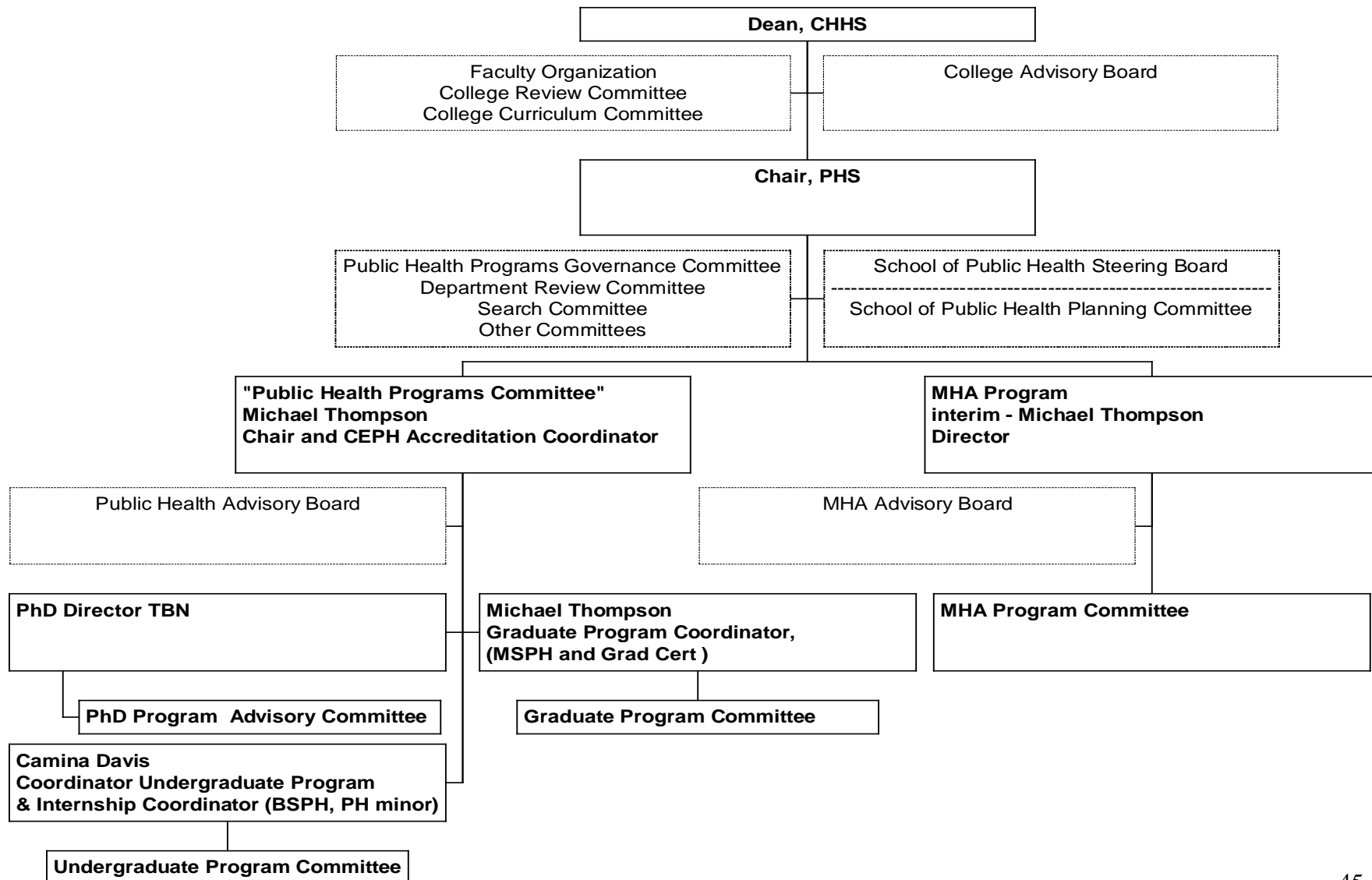
After the initial appointment by the PHS Department Chair, all future members of the Program Advisory Committee (with the exception of the Program Director who is appointed by the Chair) will be elected by the PHS Ph.D. Program Faculty.

E. The Ph.D. in PHS Program will utilize the existing Public Health Program Advisory Board composed of community members and appropriate on-campus members.

F. Organizational Chart

The primary governance structure will exist within the Department's current Public Health Programs structure – these are the degree programs in the CEPH unit of accreditation. The PHS Program Advisory Committee will become a standing committee within the Department of Public Health Sciences. All members of the Ph.D. Program Advisory Committee – including the Program Director - must be from among eligible Program or Doctoral Affiliate Faculty. The Director of the PHS Ph.D. Program will maintain a list of program and doctoral affiliate faculty.

Figure 2. Organization Chart of Department of Public Health Sciences.



VIII. ACCREDITATION

- A. **Indicate the names of all accrediting agencies normally concerned with programs similar to the one proposed. Describe plans to request professional accreditation.**
- B. **If the new degree program meets the SACS definition for a substantive change, what campus actions need to be completed by what date in order to ensure that the substantive change is reported to SACS on time?**
- C. **If recipients of the proposed degree will require licensure to practice, explain how program curricula and title are aligned with requirements to “sit” for the licensure exam.**

- A. All public health degree programs within the Department are overseen by the Council for Education in Public Health (CEPH). The curriculum for the proposed Ph.D. in Public Health Sciences is based on the core competencies that guide the planned and future doctoral level training programs established in the Dept of Public Health Sciences. These competencies are consistent with the goals and objectives of our accreditation agency. Currently both the BSPH and MSPH degrees are accredited by CEPH. *The Ph.D. in Public Health Sciences has been specifically and strategically designed from its inception to meet CEPH criteria for doctoral degree programs.* The Ph.D. can be submitted for accreditation under our existing accreditation award once there are graduates from the program.

This doctoral degree is in keeping with the Department of Public Health Sciences strategic goal to become a CEPH accredited School of Public Health. School-level accreditation requires that the Department offer doctoral degrees in three of the five core public health disciplines.

- B. The proposed program is a substantive change according to SACS definition. A letter of notification will be filed by the Provost’s office with SACS following approval by the University of North Carolina Board of Governors and prior to program implementation.
- C. There are no licensure requirements.

IX. SUPPORTING FIELDS

Are other subject-matter fields at the proposing institution necessary or valuable in support of the proposed program? Is there needed improvement or expansion of these fields? To what extent will such improvement or expansion be necessary for the proposed program?

Public health is a multidisciplinary field and faculty from other departments within the College and the University will play important roles. We have already identified 18

faculty members from other departments who have applied to be *Doctoral Affiliate Faculty*. We anticipate that additional faculty will apply to be a part of this program, once it has been approved, to have the opportunity to work with our doctoral students. These inaugural doctoral affiliates represent the departments of: anthropology, applied linguistics, communication studies, geography, nursing, psychology, social work, and sociology. These faculty represent ongoing interdisciplinary collaborations with PHS faculty that are the hallmark of public health research and leadership. These faculty members also represent disciplines with important feeder programs to sustain our student pipeline.

The proposed Ph.D. in Public Health Sciences will be strongly integrated with the Health Services Research (HSR) Ph.D. that currently is housed in the College of Health and Human Services. The HSR Ph.D. focuses on analyzing health outcomes (typically clinical health outcomes) within the health care system with the aim of improving the quality, cost effectiveness, delivery and organization of health care. Methodologically the emphasis in the HSR Ph.D. is primarily on quantitative analysis of secondary data. Another synergistic relationship is between the PHS Ph.D. and the Health Psychology Ph.D. in the College of Liberal Arts and Sciences. The Health Psychology Ph.D. emphasizes psychological processes, both cognitive and physiological, and the role of emotions (e.g. depression, anxiety, and anger) with respect to individual and community health outcomes and health behaviors. The Ph.D. in Public Health Sciences with a concentration in Behavioral Sciences is positioned between the two, by examining broad social and cultural factors that influence population health. Methodologically, the Ph.D. in Public Health Sciences delivers instruction in qualitative techniques, which is currently not available in the other two doctoral programs. There is already a high degree of interaction between the doctoral students in these existing programs and our MSPH degree program and we anticipate greater participation between these programs when the proposed program is established.

Courses: The HSR Ph.D. contains a series of courses related to quantitative methods that also will form the core quantitative methods courses in the PHS Ph.D. Six existing courses will be cross-listed as agreed to by the PHS Department Chair and the HSR Program Director (see Appendix A3, Talbot Letter of Support). Currently PHS department faculty members teach these HSR courses. HSR students also would be able to take PHS doctoral classes as electives.

As an interdisciplinary degree, Health Psychology Ph.D. students are required to take 15 credits in an area outside of their field. Many Health Psychology students register for master's level classes in the PHS department. These students would now be able to select from both master's and doctoral level classes (see Appendix A4, Gil-Rivas Letter of Support).

Faculty: As described above, PHS department faculty already teach in the HSR Ph.D. program so there would be a common use of faculty resources between these two

programs. Faculty members who are designated as *Doctoral Affiliates* will also have the opportunity to teach in the PHS Ph.D. program (see Section IV.A).

X. ADDITIONAL INFORMATION

Include any additional information deemed pertinent to the review of this new degree program proposal.

XI. BUDGET

Based upon your responses in previous sections, provide estimates of the incremental continuing and one-time costs required to implement the proposed program.

A. Estimates should be provided for the first and fourth years of the program in the following broad categories and be inclusive of applicable employee fringe benefit costs:

1. New Faculty and Instructional Support Staff (including Library)

First Year: \$372,024 (Director, Assistant Professor, 6 Graduate Assistantships including Social Security, State Retirement and Medical Insurance for all academic and non-academic staff, and tuition waivers)

We require funds for six graduate assistantships per year for the PhD program in Public Health Sciences for the first four years. The Office of Academic Affairs provides up to six research assistantships and tuition support grants for new doctoral programs. These assistantships will carry an \$18,000/year stipend (consistent with the HSR program). Additional student support will be provided through competitive fellowships awarded by the Graduate School, faculty research grants, and teaching assistantships. Students awarded these additional assistantships and fellowships are then eligible to apply for Graduate Assistant Support Plan (GASP) funding for a tuition waiver through the Graduate School.

Fourth Year: \$741,477 (assuming a 3% annual salary increase)

By year 4 we anticipate supporting 20 students through a mix of opportunities including assistantships through Academic Affairs, teaching assistantships, faculty research grants and other competitive fellowships. Students awarded these additional assistantships and fellowships are then eligible to apply for Graduate Assistant Support Plan (GASP) funding for a tuition waiver.

2. New Non-Academic Administrative Support Positions

First Year: \$21,739 (1/2 time Administrative Assistant including salary and benefits)

Fourth Year: \$23,756.64 ((assuming a 3% annual salary increase)

3. Recurring Operational Expenses (e.g., supplies, materials, telephone, travel, insurance, library or software subscriptions, equipment maintenance, etc.)

First Year: \$21,310 (Educational Supplies, Office Supplies, Travel, Communications, Printing & Binding, Advertising, Office Equipment, EDP Equipment)

Fourth Year: \$35,700

4. One-time expenses for facilities renovations or additions, equipment purchases, library materials, etc.

First Year: n/a

Fourth Year: \$15,359 (Library Book/Journal)

B. Based on the campus' estimate of available existing resources or expected non-state financial resources that will support the proposed program (e.g., federal support, private sources, tuition revenue, etc), will the campus:

1. Seek enrollment increase funds or other additional state appropriations (both one-time and recurring) to implement and sustain the proposed program? If so, please elaborate.

Yes, enrollment increase funds will be sought; the students in this program will be included in annual campus-wide enrollment projections.

2. Require differential tuition supplements or program-specific fees? If so, please elaborate.

Yes, we request an incremental tuition supplement specific to this degree program.

The Department of Public Health Sciences in the College of Health and Human Services is requesting a campus-based, tuition increment for the Ph.D. in Public Health Sciences to provide anticipated program enhancements and to cover expenses that exceed tuition revenues and enrollment increase funds. The tuition increment would apply uniformly to all students who matriculate to UNC Charlotte beginning with the program's inception and regardless of their residency status.

In comparison to similar doctoral programs both within NC and in the surrounding region, the UNC Charlotte graduate tuition and fee rates are below the average of institutions offering similar degrees (see Table 1). This difference exists regardless of whether the other doctoral program is professionally accredited.

The proposed program can be considered for inclusion into our ‘unit of accreditation’ (e.g., our current Council on Education for Public Health (CEPH) accredited MSPH & BSPH Programs) once it produces its first graduate, estimated at 4-5 years, making this program highly competitive. The incremental tuition will support an enhanced student experience, providing funds to support financial aid, student research and dissemination of research findings, student and faculty development, community engagement activities and increased accreditation activities.

Table 1. Comparison of Fulltime Tuition and Fee Schedules for Doctoral Degree Programs (In-State or Fixed/Private Rates) for Schools with Similar Programs in Behavioral or Community Health

Institution	Public or Private	CEPH Accredited	Annual Tuition and Fees (In State or Private)
East Tennessee State	Public	Yes	\$9,346
Emory University	Private	Yes	\$40,650
Florida International University	Public	Yes	\$13,813
Georgia Southern University	Public	Yes	\$7,500
University of North Carolina at Chapel Hill	Public	Yes	\$10,550.48
University of North Carolina at Charlotte	Public	No*	\$6,350
University of North Carolina at Greensboro	Public	No*	\$6723
University of South Carolina	Public	Yes	\$13,172
University of Georgia	Public	Yes	\$8,724
University of Louisville	Public	Yes	\$10,274
Virginia Commonwealth University	Public	No*	\$9,854

*Has accredited master’s but not doctoral degree

- a. **State the amount of tuition differential or program-specific fees that will be requested.**

We would follow the established tuition schedule for graduate students including: full tuition increase at 9 hours or more of \$900 per semester; $\frac{3}{4}$ of tuition increase at 6-8 hours (\$675.00); $\frac{1}{2}$ of tuition increase at 3-5 hours (\$450.00); and $\frac{1}{4}$ of tuition increase at 1-2 hours (\$225.00). This rate is consistent with tuition increments for other graduate programs at UNC Charlotte. The proposed tuition increment would put our annual tuition and fees at \$8,149. This rate is aligned with those of other schools in the Southeast but still price competitive. The proposed tuition increment per credit hour are shown below (Tables 2.1 and 2.2, based on the 2012-2013 rate schedule) and will be re-evaluated by the program on a three-year basis.

Table 2.1. Ph.D. in Public Health Sciences Program Proposed Tuition Schedule for NC Resident Students				
In-State Students	Current Semester Tuition	Proposed Tuition Increment	Fees	Total Semester Tuition
Credit Hours				
1-2	491.25	225.00	386.15	1102.40
3-5	982.25	450.00	386.15	1818.40
6-8	1473.50	675.00	723.25	2871.75
9+	1964.50	900.00	1210.00	4074.50

Table 2.2. Ph.D. in Public Health Sciences Program Proposed Tuition Schedule for Non- Resident Students				
Non-resident Students	Current Semester Tuition	Proposed Tuition Increment	Fees	Total Semester Tuition
Credit Hours				
1-2	2027.00	225.00	386.15	2638.15
3-5	4054.00	450.00	386.15	4890.15
6-8	6081.00	675.00	723.25	7479.25
9+	8108.00	900.00	1210.00	10218.00

- b. Describe specifically how the campus will spend the revenues generated.**

Table 3 presents the proposed revenues from the tuition increment based on our estimated degree program enrollment numbers.

Table 3. Proposed Tuition Increment Revenue Stream per Year based on Projected Enrollment				
	Year 1 2013-14	Year 2 2014-15	Year 3 2015-16	Year 4 2016-17
Full-time student enrollment	6	12	19	21
Incremental Tuition Revenues	\$10,800.00	\$21,600.00	\$34,200.00	\$43,200.00

The proposed tuition increment will be used to benefit students, both directly and indirectly. Twenty-five percent of the tuition increment dollars will be used to provide need-based, student financial assistance. The remaining funds will be used to expand student learning opportunities; student services; provide professional development support and resources for students; support community engagement activities of students, facilitate student research and dissemination of research findings and improve our accreditation processes.

Student Learning

Funds will be available for other scholarships to support international learning opportunities and to increase the number of graduate assistantships available in the department. For example, scholarships will be established to offer financial assistance to graduate students for overseas travel, based on merit and financial need (10%). Financial support for international learning opportunities – including, for example, the College’s study abroad programs in Malawi and Costa Rica – is critical to understanding cultural differences in health behaviors. Graduate Assistantships offer an invaluable learning opportunity for graduate students and enable faculty members to extend their teaching and research efforts both inside and outside the classroom. A portion of the tuition increment funds will be used to increase the number of assistantships in the Department of Public Health Sciences that serve the Ph.D. program (15%).

Student Services

Student services that will be enriched will include, but are not limited to, enhanced orientation programs, a regular speaker series, professional networking events, and educational programs conducted jointly with the profession. For example, tuition increment funds can expand the activities of the Graduate Student Public Health Association and the Delta Omega Honor Society for public health students. Students' experience will also be greatly enhanced by exposure to cutting edge researchers in the field of social and behavioral science; thus a speaker series will be an important addition to our program.

Student Research Support

Many students need a modest amount of funds to support their research for equipment, participant incentives or travel reimbursement. A portion of the tuition increment funds will be available for students' dissertation research through a mini-grant process. Mini-grants of \$500-\$1000 will be available through a competitive process to cover research expenses associated with: participant incentives, photocopying, recruitment, travel for data collection and other research expenses. Students attending research conferences to present their work will also be able to apply for conference travel funds.

Community Engagement Activities

The larger Charlotte public health community is eager to have doctoral students working with them on projects. Tuition increment funds will be available to facilitate student collaborations with public health agencies and by extension these interactions will further the program's reach and reputation. These funds will help cover printing/communication, travel, laptops to work in the community, and other minor expenses that students may incur.

Accreditation Support

Current demands by accreditation agencies and outcomes-based assessment and evaluation expectations require continuous, timely, and accurate information and data about our students, their progress, and their success. A portion of the requested funds will be used to enhance our record-keeping and information-based systems that can contribute to meeting the growth, analysis, and prediction of student enrollment, student retention, and student success through increased use of technology, personnel, and training.

Planned Allocation of Proposed Tuition Increment Funds

Based on projected enrollments, the tuition increment would generate \$10,800 in the first year of the program. The planned distribution of these

additional funds among program needs is shown in Table 4 for the first 4 years of the Ph.D. program.

Table 4. Planned Allocation of Tuition Increment Funds				
Activity	Year 1 2014-15	Year 2 2015-16	Year 3 2016-17	Year 4 2017-2018
Financial Aid (25%)	\$2700	\$5400	\$8550	\$10,800
Student Learning (25%)	\$2700	\$5400	\$8550	\$10,800
Student Services (15%)	\$1620	\$3240	\$5130	\$6480
Student Research (20%)	\$2160	\$4320	\$6840	\$8640
Community Engagement (5%)	\$540	\$1080	\$1710	\$2160
Accreditation (10%)	\$1080	\$2160	\$3420	\$4320
Total	\$10,800	\$21,600	\$34,200	\$43,200

- c. **Does the campus request the tuition differential or program-specific fees be approved by the Board of Governors prior to the next Tuition and Fee cycle?**

Yes, if authorized to operate the program, the campus requests that fees be approved prior to the tuition and fee cycle appropriate for the start date of the program.

- C. **If additional enrollment increase funding or other state appropriations elaborated above are not forthcoming, can the program still be implemented and sustained and, if so, how will that be accomplished? Please elaborate.**

Yes, the program will be implemented and sustained by redirecting internal funds as necessary. Additional cost recovery is anticipated based on the full tuition from out of state students and support for graduate students on faculty research grants.

XII. EVALUATION PLANS

All new degree program proposals must include an evaluation plan which includes:

- A. Criteria to be used to evaluate the quality and effectiveness of the program, including academic program student learning outcomes.

- B. Measures (metrics) to be used to evaluate the program (include enrollments, number of graduates, and student success).
- C. The plan and schedule to evaluate the proposed new degree program prior to the completion of its fourth year of operation.

PROGRAM EVALUATION FORMAT

A. Criteria to be used to evaluate the quality and effectiveness of the program:

Evaluation of the Ph.D. in Public Health Sciences with a concentration in Behavioral Sciences will be incorporated into the CHHS College annual evaluation process (coordinated by the Associate Dean for Academic Affairs) and as part of the Department's annual report to CEPH to maintain our accreditation. CEPH accreditation examines student outcomes, student service, scholarship, diversity, and program graduation rates.

The primary measures used to evaluate the effectiveness of the program are based on student achievement of the proposed competencies (see Appendix A10) and the stated educational objectives (from Section I.B) that have been reworded here to be consistent with SACS student learning objectives (SLO). Specific measures include:

SLO 1. Graduates will possess and apply core public health knowledge and skills and demonstrate mastery of a specialized area.

Measure: 80% of the students will pass the methods, behavioral sciences, and specialty content sections of the written comprehensive exam on the first attempt

SLO 2. Graduates will be able to design and analyze behavioral science research relating to public health using advanced quantitative and qualitative methods.

Measure: 80% of the students attempting a dissertation proposal defense will pass on the first attempt

SLO3. Graduates will be able to conduct research on social and behavioral factors in a variety of public health and community settings.

Measure: 90% of the students attempting a final dissertation defense will pass on the first attempt

SLO 4. Graduates will communicate and disseminate behavioral science knowledge to community/lay, practitioner, academic, and scientific audiences.

Measure: 75% of students will have co-authored a podium or conference presentation for a professional or lay community audience prior to graduation

SLO 5. Graduates will be able to engage in culturally competent and ethically sound research practices.

Measure: 100% of students will complete the IRB training module the university requires of student researchers by the end of their second year of matriculation

B. Measures to be used to evaluate the program:

Specific criteria will include:

- Admissions information: number of applicants, number admitted, and number enrolled
- Quality of applicants based on GPA and GRE scores
- Graduation rates – 80% of students will graduate within 6 years (CEPH mandates 80% graduation rates)
- Employment rates – 80% of graduates will be in profession-related jobs or post-doctoral programs within 12 months of graduation
- Levels of external funding to support student research
- Projected productivity levels (number of graduates):

<u>Level</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>TOTALS</u>
B	_____	_____	_____	_____	_____
M	_____	_____	_____	_____	_____
I/P	_____	_____	_____	_____	_____
D	<u> 0 </u>	<u> 0 </u>	<u> 0 </u>	<u> 5 </u>	<u> 5 </u>

(Key: B-Bachelor's, M-Master's, I/P-Intermediate or Professional, D-Doctoral)

C. Plan for evaluation prior to completion of the fourth operational year.

Year 1: Evaluation will focus on recruitment (materials, placement, outreach) and admissions procedures, and the size and quality of the resulting applicant pool. This analysis will allow time to revise as needed for years 2 and 3.

Year 2: Evaluation will focus on the foundational curriculum based on student evaluations and faculty experiences with teaching, and the sequence of courses.

Year 3: Evaluation will focus on the administration and results of the qualifying examination with particular attention to student outcomes in relation to the curriculum content.

Year 4: Evaluation will concentrate on the program competencies and student progress based on students' *curriculum vitae*, faculty feedback on students' preparedness

to conduct research, and progress through the dissertation process. For graduating students, exit surveys will be used to assess overall feedback on the doctoral curriculum and process.

XIII. REPORTING REQUIREMENTS

Institutions will be expected to report on new program productivity as a part of the biennial low productivity program review process.

This proposal to establish a new degree program has been reviewed and approved by the appropriate campus committees and authorities.

Chancellor: Philip J. Rubin Date: 8/19/13

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