LONG SIGNATURE SHEET

UNC CHARLOTTE

Proposal Number: HLTH 04-25-11

Proposal Title Initiation of the Graduate Curriculum for the PhD in Public Health Sciences

Originating Department Public Health Sciences

TYPE OF PROPOSAL: UNDERGRADUATE_____ **GRADUATE** ✓ **UNDERGRADUATE & GRADUATE**____
(Separate proposals sent to UCCC and Grad. Council)

DATE RECEIVED	DATE CONSIDERED	DATE FORWARDED	ACTION	SIGNATURES
8/12/11	8/12/11	8/12/11	*Approved*	**DEPARTMENT CHAIR** [print name here] Vivian B. Lord
8/12/11	9/12/11	10/24/11	*Approved*	**COLLEGE CURRICULUM COMMITTEE CHAIR** Print name: Michael E. Thompson
10/25/11	11/10/11	11/10/11	*Approved*	**COLLEGE FACULTY CHAIR** Print name: Cynthia Toth
11/11/2011	11/14/2011	11/15/2011	*Approved*	**COLLEGE DEAN** Print name here if signing on behalf of Dean: Jane B. Neese
			Approved	**UNDERGRADUATE COURSE & CURRICULUM COMMITTEE CHAIR** (for undergraduate courses)
11/15/11	12-6-11	1-31-12	*Approved*	**GRADUATE COUNCIL CHAIR** (for graduate courses) Rob Roy McGregor
			Approved	**FACULTY GOVERNANCE SECRETARY** (noting Faculty Council approval on Consent Calendar)
				FACULTY EXECUTIVE COMMITTEE (if decision is appealed)

Revised 10/20/10
OAA/cag

PROPOSAL NUMBER: HLTH 04-25-11

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE

LONG FORM GRADUATE COURSE AND CURRICULUM PROPOSAL, New

NEW GRADUATE Course and Curriculum Proposal from the Department of Public Health Sciences

TITLE: Initiation of the Graduate Curriculum for the PhD in Public Health Sciences

A. Proposal Summary and Catalog Copy

1. SUMMARY. The Department of Public Health Sciences (PHS) proposes a new curriculum of 63 credit hours (post-masters) to form the course requirements for a PhD in Public Health Sciences with a concentration in Behavioral Sciences. The proposed degree is currently being developed in detail as part of the required University system "Plan to Establish." This degree program was approved in August 2010 by the UNC system General Administration to begin this implementation planning process.

This proposal will add 19 new graduate courses (5 of these are existing HSRD courses that are being cross-listed):

HLTH 6200, Introduction to Public Health (3)
HLTH 8000, Special Topics in Public Health Sciences (1-4)
HLTH 8201, Introduction to Quantitative Research Design (3) – cross listing of HSRD 8101
HLTH 8220, Theories and Interventions in Behavioral Science (3)
HLTH 8221, Theory Generation in Behavioral Sciences (3)
HLTH 8222, Theory Generation and Analysis in Behavioral Sciences (3)
HLTH 8223, Social Determinants of Health (3)
HLTH 8260, Analytic Epidemiology (3) – cross list of existing HSRD 8003
HLTH 8270, Applied Biostatistics: Regression (3) – cross listing of existing HSRD 8110
HLTH 8271, Applied Biostatistics: Multivariate (3) – cross listing of existing HSRD 8111
HLTH 8272, Large Data Sets and Health Services Research (3) – cross list of existing HSRD 8103
HLTH 8282, Health Survey Design and Research (3)
HLTH 8600, Seminar in Public Health Sciences (1-6)
HLTH 8601, Ethics in the Public Health Profession (3)
HLTH 8602, Communicating and Disseminating Research (3)
HLTH 8603, Teaching Portfolio (3)
HLTH 8800, Independent Study in Public Health Sciences (1-6)
HLTH 8901, Dissertation Research (1-9)
HLTH 9999, Doctoral Degree Residency Credit (1)

Modify 1 existing course:

HLTH 6281/8281, Measurement and Scale Development (3)

2. PROPOSED CATALOG COPY.

See ***Appendix A – PhD Catalog Copy*** for a complete listing of all degree program catalog text and catalog copy for each course.

B. JUSTIFICATION

1. Need: This proposal meets the need for a doctoral degree in Public Health Sciences with a concentration in behavioral sciences. The need for this degree has been identified in the Department's strategic plan and confirmed by the UNC General Administration in its review and approval of the "Authorization to Plan."

   The Ph.D. in Public Health Sciences will train students to understand and address the health determinants that related to prevention and management of disease and disability among populations, particularly diverse and vulnerable groups, using the social-ecological framework. The social ecological framework includes individual, social, environmental, and policy factors. The curriculum and competency framework are designed as a generic, umbrella framework that will allow for multiple concentrations to be developed as the Department grows toward a School of Public Health. The Core Public Health courses, which will be common to all doctoral students regardless of concentration, include rigorous methods courses and professional seminars necessary to train academic teachers and researchers.

   The concentration in behavioral sciences focuses on the social and cultural factors that influence health behavior and thus, health outcomes – in particular those factors that contribute to health disparities among minority and vulnerable populations. The curriculum focuses on developing and applying theoretical frameworks using qualitative and quantitative methods and working in collaboration with community-based public health partners to address contemporary public health problems. The focus is on broad factors that influence health on a population level and working with multidisciplinary teams in the community. A specific emphasis is placed on qualitative research and the generation and analysis of theoretical concepts as key components of our understanding of social and behavioral determinants.

   The Ph.D. in Public Health Sciences differs from the Ph.D. in Health Services Research (HSR), which is focused on health outcomes within the health care delivery system. It is also different from the Ph.D. in Health Psychology, which addresses individual and family health and illness but focuses on cognitive and physiological processes that can influence health outcomes and health behaviors.

   The PhD in Public Health Sciences with a concentration in behavioral sciences focuses on training doctoral level researchers in the discipline of health behavioral research as it relates to primary, secondary and tertiary prevention of disease and disability. The framework underlying the outcomes and competencies of this behavioral training is adopted from the American Academy of Health Behavior

(AAHB) outcomes of doctoral level training (American Academy of Health Behavior Work Group on Doctoral Research Training, 2005). However, there is considerable overlap between the AAHB and the American Schools of Public Health (ASPH) DrPH competency development project model (ASPH, 2009). The following 8 outcomes guide the proposed PhD in Public Health Sciences. They describe the breadth and depth of knowledge that students must obtain to graduate with a doctoral degree. Doctorally trained researchers from our programs will:

- 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

These 8 outcomes form 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 (Council for Education in Public Health [CEPH]). See ***Appendix B*** for the Conceptual Model and Competencies.

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 accreditation requires that the Department offer doctoral degrees in 3 of the 5 core public health disciplines.

PHS faculty are well-prepared to deliver a Ph.D. program as our faculty are already participating in various doctoral programs across the UNC Charlotte campus. Currently faculty teach in the Health Services Research doctoral program (Huber, S. Laditka, J. Laditka, Studnicki, and Thompson, and in the past also Racine and Warren-Findlow). Faculty also participate in advising the administration of doctoral programs (Dr. Huber on Biology; Dr. Warren-Findlow in Health Psychology; and Dr. Studnicki in Health Services Research). Most faculty have participated as dissertation committee members for doctoral students in different programs, and several are now chairing or co-chairing dissertation committees. Faculty also mentor and publish with doctoral students.

2. Prerequisites:

The design of the Ph.D. in Public Health Sciences with a concentration in behavioral sciences curriculum and the course sequencing is structured to facilitate realistic progression through the program based on prior course work; to leverage existing

teaching resources; and to provide opportunities for cohesiveness among doctoral students within the department and the College.

To leverage existing resources, several of the research design and quantitative research courses are cross-listed with HSRD doctoral courses with the same content. These courses are currently taught by PHS faculty and have been approved by the HSR Director for cross-listing. See ***Appendix C – Letter from Laura Talbot, HRSD Director***.

The proposed Ph.D. in Public Health Sciences with a concentration in Behavioral Sciences is a 63 credit hour curriculum. The curriculum is organized to facilitate future concentrations or tracks as they are developed (see ***Appendix D – PhD Modular Curriculum***).

First, are the Required Prerequisite Foundation Courses in Public Health. All students must either have already obtained an MPH/MSPH degree or take these required courses in public health (9 credit hours), all of which are offered in the Fall. While all doctoral students will start in the Fall semester, some students will take some or all of the pre-requisite Foundation courses, while others will start directly in the PHS doctoral curriculum. Thus, the curriculum sequence is designed to be flexible and allow the former group to "catch up" with their cohort (see ***Appendix E – PhD Course Sequence***).

Second, are the Core Public Health Courses (24 credit hours) that all Public Health Sciences doctoral students will take (regardless of concentration). These consist of Methods courses (15 credit hours), which are primarily quantitative in nature; and Professional Seminars (9 credits), which prepare students for teaching, conducting and communicating research, and grounding them in ethical foundations necessary to succeed in academia and practice.

Third, are the courses that define the Concentration in Behavioral Sciences (12 credit hours). These courses include a 2 course sequence of qualitative methods related to theory development and analysis, an overview of the social factors related to health and the social-ecological model, and then a course which examines theoretical interventions.

Fourth, students are required to have a 3 course concentration in a specialty area of their choosing (9 credit hours). These courses will be selected with the approval of the student's advisor.

Fifth, are the University required dissertation hours (minimum 18 credit hours).

Last, are optional electives or courses that can be used as part of a methods-oriented concentration. These are existing HSR courses that will be cross-listed.

There are two primary thematic sequences evident in the curriculum. One, is that students in the behavioral sciences concentration must be grounded in behavioral science concepts such as health determinants and theory before proceeding to the theory generation, analysis and measurement courses. Two, students must have sufficient background in research design before taking survey design. We have maintained the quantitative course sequence as outlined in the HSR curriculum. For the professional seminars, ideally students will take ethics first and dissemination will be more salient toward the end of their course work. These classes will be taught on alternating years. The teaching portfolio class will be taught in the spring semester of the 1st year, to prepare students for teaching undergraduate public health classes in their 2nd year of study.

Course Number	**Name**	**Pre-requisites**
HLTH 6200	Introduction to Public Health (3)	None
HLTH 8000	Special Topics in Public Health Sciences	None
HLTH 8223	Social Determinants of Health (3)	None
HLTH 8220	Theories and Interventions in Behavioral Science (3)	None
HLTH 8221	Theory Generation in Behavioral Sciences (3)	8220
HLTH 8222	Theory Generation and Analysis in Behavioral Sciences (3)	8221
*HLTH 8201	Introduction to Quantitative Research Design (3)	None
*HLTH 8260	Analytic Epidemiology (3) – cross list of existing HSRD 8003 course	6202
*HLTH 8270	Applied Biostatistics: Regression (3)	6203
*HLTH 8271	Applied Biostatistics: Multivariate (3)	8270
*HLTH 8272	Large Data Sets and Health Services Research (3) – cross list of existing HSRD 8103	8271 and HSRD 8102
HLTH 8281	Measurement and Scale Development (3)	8220
HLTH 8282	Health Survey Design and Research (3)	8201
HLTH 8600	Seminar in Public Health Sciences	None
HLTH 8601	Ethics in the Public Health Profession (3)	None
HLTH 8602	Communicating and disseminating Research (3)	2nd year student
HLTH 8603	Teaching portfolio (3)	2nd semester student
HLTH 8800	Independent Study in Public Health Sciences (1-6)	None, permission of instructor and PhD Advisor
HLTH 8901	Dissertation Research (1-9)	Pass on the Comprehensive Exam and approved dissertation committee
*denotes HSR cross-listed course		

3. The course prefix (HLTH) is consistent with University assigned codes. The numbering scheme is consistent with PHS departmental designation of courses by content, and whether or not the courses require prerequisites.
   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	

4. The proposed Ph.D. curriculum will increase the scope of degree program offerings within the PHS department, and within the College of Health and Human Services. Having additional doctoral level (8xxx) courses will benefit HSR doctoral students who will now have additional electives available. This degree program will also increase HSR class sizes, further leveraging teaching resources. While in many instances increasing a class size can be a negative, in this case the increased class size will make for more robust student participation and class discussion without degrading the instructor-to-student ratio (e.g. increasing from 5 students to 10 or 15). Further, the program and modular design of the curriculum are structured to facilitate the addition of future PhD degrees that will be needed to achieve School status according to CEPH accreditation requirements.

C. IMPACT

1. This proposal will serve primarily doctoral students, mostly newly enrolled Public Health Science Ph.D. students. Secondarily, HSR Ph.D. students will benefit from an expanded number of courses at the doctoral level, and from increased numbers of doctoral students in the college. We also anticipate that Health Psychology Ph.D. students who frequently take classes in the MSPH degree program may register for these 8000 level courses as well as Public Policy or BioInformatics Ph.D. students. MSPH students will also have the opportunity for an additional elective (HLTH 8281/6281). While HLTH 6281 has existed within the Department, it has not been taught in the last 5-6 years.
2.
    - **a)** **See *Appendix F – Course Scheduling*** for details of course offerings.
    - **b)** The frequency of offering some HSRD courses that are also HLTH courses, may be increased. In order to have a sufficient class size to justify the teaching/instructor resources, some HSRD courses have not been taught annually, but in alternating years. With HLTH doctoral students also needing these classes, the class size will now be large enough for those classes to be offered annually. The content of HSRD 8101/HLTH 8201 will have less emphasis on qualitative methods as there will now be a 2 course qualitative methods sequence (HLTH 8221 & HLTH 8222). Currently HSRD 8101 is approximately 50% qualitative content, and that will be reduced to about 20%.
    - **c)** Initial, anticipated enrollment in these new courses will be 5-10 students for HLTH core courses (HLTH 8220-8223) and 10-20 for HLTH/HSRD cross-listed courses.
    - **d)** Enrollment in HLTH/HSRD cross-listed courses, and possibly some other courses that may be used as a specialty content area or electives, will increase. Current course enrollment for HSRD courses is 5-10 students, but occasionally some classes have as few as 3 students in them. The addition of 6-10 students from Public Health Sciences doctoral program will increase class sizes to 10-20.
    - **e)** None of these courses have been previously taught as special topics.
    - **f)** We have written the catalog copy for all proposed courses, description of the degree program, requirements of the degree, etc… See ***Appendix A – PhD Catalog Copy***.

D. RESOURCES REQUIRED TO SUPPORT PROPOSAL.

1. Personnel
    - **a.** By Year 3, 3 new, full-time faculty (including an administrative Director who teaches half-time) are required to teach the proposed classes in the Ph.D. Public Health Sciences curriculum when there are 3 cohorts enrolled simultaneously. In addition to the increased teaching load, faculty will need to participate as Advisors, as dissertation chairs and dissertation committee members, and on the Comprehensive Exam committee. The program also will require a Director to

administer the program. This individual will also have ½ time teaching responsibilities.

For Year 1, we would need 2 new full-time faculty positions, one of which will be the Director. For Year 2, we would need an additional faculty person by the spring semester. **These additional full-time faculty members are required in order for the department to maintain the student-to-faculty ratios required for our accreditation (10:1)**.

b. The following faculty members are interested in teaching doctoral courses in the Ph.D. in Public Health Sciences:

Arif, Ahmed – HLTH 8281
Dmochowski, Jacek – HLTH 8270, 8271
Harver, Andrew – HLTH 8201, 8602
Huber, Larissa Brunner – HLTH 8260, 8603
Laditka, James – HLTH 8201, 8602
Laditka, Sarah – HLTH 8223, 8602
Piper, Crystal – HLTH 6200, 8223
Platonova, Elena – HLTH 8603
Portwood, Sharon – HLTH 8220, 8223
Racine, Elizabeth – HLTH 6200, 8601
Studnicki, James – HLTH 8272
Thompson, Michael – HLTH 6200, 8201, 8281, 8282
Warren-Findlow, Jan – HLTH 8220, 8221, 8222

2. Physical Facility – There will be an increased need for 2-5 small classrooms per semester, shared office space for doctoral students with graduate assistantships, storage space for student files, and offices for new faculty.
3. Equipment and Supplies – Additional equipment and supplies that are commensurate with the hiring of 3 additional faculty.
4. Computer – With consultation with the CHHS Office of Health Informatics, we do anticipate the need for more computers (both for students as GAs and additional faculty), a qualitative software site license for teaching the qualitative course sequence, and a site license for a statistical package that performs confirmatory factor analysis and other procedures related to measurement and scale development. The costs for these resources have been added into the budget.
5. Audio-visual – We do not anticipate any increased need for audio-visual equipment or services.
6. Other Resources - None
7. Sources of funding – Funding will be obtained through enrollment increase funds, reallocation of existing institutional resources, and faculty research grants.

E. CONSULTATION WITH THE LIBRARY AND OTHER DEPARTMENTS OR UNITS

1. Library Consultation – On 1/4/2011, Dr. Warren-Findlow met with Ms. Jean Hiebert, the CHHS library liaison, to discuss the needs of the proposed Ph.D. program. Ms. Hiebert prepared a library consultation report (See ***Appendix G – Consultation on Library Holdings***) indicating that the current holdings in Atkins Library are "adequate."
2. Consultation with other Departments or Units – For the development of this Ph.D. program proposal, we consulted with directors and/or coordinators of related doctoral programs across the UNC Charlotte campus. The purpose of these consultations was to solicit "lessons learned" in terms of establishment and administration of the program, funding sources for students, and any other advice that recently established programs could contribute. We met with Directors from: Biology (Cordova), Geography (Furuseth), Health Psychology (Gil-Rivas), Health Services Research (Cordova and Talbot), Nursing (Foss), Organizational Science (Shanock), and Public Policy (Swindell). Multiple topics were discussed: the ratio of full-time to part-time students, using doctoral students as course instructors, the need for students to form a cohort, budgeting, admissions, the role of a steering or advisory committee, the Director's job description and qualifications, dissertation committee makeup, student recruitment, and need for students to obtain grant funding. These were very fruitful and productive conversations. All directors could see many complementary benefits of having a PhD in Public Health Sciences. See ***Appendix H PhD Director Meeting Minutes*** for further details.

   We also consulted with Dr. Talbot as to the cross-listing of the 5 HSRD courses with HLTH. Dr. Talbot gave her approval for these cross-listings. See ***Appendix C Talbot Support Letter*** and ***Appendix I*** - letter of support from Dr. Gil-Rivas, Director of the Health Psychology PhD program.

F. INITIATION AND CONSIDERATION OF THE PROPOSAL

1. Originating Unit – Within PHS, the curriculum has been discussed at 4 departmental faculty meetings, and has been vetted through the Public Health Programs organizational structure. The proposal was first reviewed and unanimously approved by the MSPH Program Committee on 01/27/11, which currently administers all graduate programs. That review was followed by the Public Health Programs Governing Committee (PHPGC) review and approval on 03/28/11, and then the full PHS faculty review. The PHS department faculty voted on the proposal on April 25, 2011. Thirteen faculty members were present for the discussion; twelve voted and approved the proposal. One faculty member left before the vote took place (Harver).
2. Other Units – no other units were involved in this proposal.

G. ATTACHMENTS

The attachments include the appendices A through I, and course syllabi are attached for all proposed new and revised courses except for HLTH8000, HLTH8600, HLTH8800,

HLTH8901, and HLTH9999 (special topics, seminars, independent study, dissertation hours, and graduate residency credit). Also included are:

The Request for Authorization to Establish

Approval Letter to Chancellor DuBois September 2010

American Academy of Health Behavior Work Group on Doctoral Level Training

Letters of Support from the UNC Charlotte community and larger metropolitan Charlotte community leaders and organizations

<u>CATALOG COPY:</u> PhD in Public Health Sciences – Concentration in Behavioral Sciences

Department of Public Health Sciences
CHHS 431
http://publichealth.uncc.edu

Director
TBN

Program Faculty

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

PHD IN PUBLIC HEALTH SCIENCES

The focus of the PhD 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 an emphasis on health determinants related to the prevention and management of disease and disability <u>among diverse and vulnerable populations</u> in the United States. Working with the community in multidisciplinary teams to understand and develop programs that address the broad social-ecological factors that influence health behavior and thus health outcomes is the primary emphasis of this doctoral degree.

Drawing on the social-ecological framework, public health is an interdisciplinary field encompassing public health practice in the community; scientific research utilizing theoretical perspectives from disciplines such as anthropology, economics, geography, gerontology, medicine, nursing, psychology, and sociology; and 5 core areas of endeavor: environmental and occupational health, biostatistics, epidemiology, social and behavioral health factors, and health policy and administration.

Coursework for the PhD in Public Health Sciences with a concentration in behavioral sciences has a dual emphasis on qualitative and quantitative methods, and the development, application, and measurement of theory to understand the social and cultural factors that influence health behavior. Additionally students train to be a well-rounded public health professional: partnering with community agencies and stakeholders, learning how to disseminate research to diverse audiences, publishing in peer-reviewed formats, teaching in an academic environment, and conducting themselves with high ethical standards in all venues. Full-time students can complete the degree requirements within 4 years; we anticipate that most full-time students will complete the program within 5 years depending upon the design of their dissertation research.

Graduates are prepared to work in academia, conduct large-scale behavioral research projects, or work in government or health-related venues.

Admission Requirements

All students must complete an online application to the Graduate School. Applications must be completed by January 1st. The minimum admission requirements for the program are as follows:

1. Master's degree in public health or a related field with a minimum GPA of 3.5 (A=4.0) in all graduate work.
2. Competitive GRE scores. GRE scores prior to August 2011 are recommended to be a minimum combined score of 1100 on the Verbal Reasoning and Quantitative Reasoning sections of the GRE and minimum score of 4 for the Analytical Writing section.
3. 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.
4. A statement of purpose in which the applicant details why she/he wants to pursue a PhD in Public Health with a concentration in *Behavioral Sciences* at UNC Charlotte.
5. Three letters of recommendation; at least two letters from former professors familiar with the applicant's graduate work.
6. Students who have not completed a CEPH (Council on Education for Public Health) accredited Master's degree in public health may be required to take additional courses as determined by the PhD Review Committee upon review of current CEPH requirements. Such courses will be specified at the time of admission into the program.

Application Review

Applications are reviewed for admission in January. We strongly encourage prospective students to visit the campus and meet with program faculty. Admission decisions are typically made in early February.

Pre-requisite course work

Students who graduated with an MPH or MSPH degree from a CEPH accredited program or school are assumed to have met the required prerequisite foundation courses. Students entering with a master's degree in a field other than public health must complete the Required Prerequisite Foundation courses in Public Health in the first year of starting the program in

consultation with the PhD Director and/or Advisor. These prerequisite foundation course credits do not count toward the 63 semester credit hours required for the PhD.

Required Prerequisite Foundation courses in Public Health (9 credits)

HLTH 6200 Introduction to Public Health
HLTH 6202 Community Epidemiology (introductory epidemiology)
HLTH 6203 Public Health Data Analysis (introductory biostatistics)

Degree Requirements

Total hours required

The program requires 63 post-master's credit hours. All coursework must be taken at the 6000-level or above. The majority of the courses will be at the 8000-level.

Course Requirements

The curriculum has 5 major components:

1. Methods: 15 credits
    a. Introduction to Quantitative Research Design (3)
    b. Measurement and Scale Development (3)
    c. Health Survey Design and Research (3)
    d. Applied Biostatistics: Regression (3)
    e. A 3 credit course in Multivariate methods consistent with the competencies for the concentration
2. Professional Seminars: 9 credits
    a. Ethics in the Public Health Profession (3)
    b. Communicating and disseminating Research (3)
    c. Teaching portfolio (3)
3. Concentration courses in Behavioral Sciences: 12 credits
    a. Social Determinants of Health (3)
    b. Theories and interventions in Behavioral Science (3)
    c. Theory Generation in Behavioral Sciences (3)
    d. Theory Generation and Analysis in Behavioral Sciences (3); prereq 8221
4. Specialty content: 9 credits– Specialty content areas will be determined in consultation with the doctoral student's advisor and make use of expertise and course offerings on the UNC Charlotte campus. Specialty areas can focus on a specific population (e.g. older adults/gerontology or maternal & child health [MCH]), a health issue (e.g. AIDS), or approach (e.g. psychology). A specialty area should cover literature related to: health and social policy issues, epidemiology of a health condition/population, relevant theories or approaches related to the condition/population, and/or current topics in the area. Course work must be at the 6xxx/8xxx level.
5. Dissertation: minimum 18 credit hours

Required Grades

Students must maintain a minimum, cumulative grade point average of 3.0 (A=4.0) in all course work taken in the program. An accumulation of 2 C grades will result in suspension of enrollment in the doctoral program.

A grade of U or NC constitutes an automatic termination of enrollment.

Students who do not pass the qualifying exam, the dissertation proposal defense, or the final dissertation defense are automatically terminated from the program.

Transfer Credit

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 PhD program limits master's level transfer credits to at most 6 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 PhD Program Director, in conjunction with Program Faculty, approves graduate level transfer credits. Students must apply for transfer of graduate levels courses within the first year of enrollment, or within one semester following completion of the course if taken during the PhD 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 PhD 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.

Comprehensive Exam

As detailed more fully in the Public Health Sciences PhD Student Handbook, all PhD students must pass a comprehensive exam after completing the foundation, specialty and methods courses, and *prior* to the dissertation proposal defense, typically after year two of the program. Students must take the exam within 12 months of finishing all of the required course work.

The comprehensive exam is offered twice per year and all students sit for the exam at one of these two times. The exam consists of three sections: 1) Concentration; 2) Methods; and 3) Specialty Content area. The Chair of the qualifying exam committee, who will be a member of the PhD Program Faculty other than the Director, will work with the faculty to assemble, administer, and grade the exam. The exam will take place during a one week period. The first two sections will follow an in-class format, while the specialty content section will be in the form of a take home exam customized for each student. Students are recommended to meet with their specialty content faculty to develop a content reading list from which questions will be drawn. Students may not defend their dissertation proposal until they have successfully passed the 3 components of the comprehensive exam.

Grading of the comprehensive exam

The overall exam outcome is graded as honors, pass, or fail. Each exam component is graded on a pass/fail basis. Students earn an honors pass, pass, marginal pass, or fail. Only one component can receive a marginal pass and still have an overall pass on the exam. Students passing the exam and receiving an honors pass on two or more of the components, will be considered to have passed with honors. If students fail one or more components of the exam, the failed components can be retaken only once.

The Dissertation Process

The dissertation is 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. Students cannot register for dissertation credits until they have passed their comprehensive examination. Students must complete a minimum of 18 credit hours of dissertation research activity. Per University policy, students must be continuously enrolled in dissertation credit hours beginning with the semester after the dissertation topic proposal is approved, through and including the semester of graduation.

Selecting a dissertation Chair – The student should select a dissertation Chair, who must be a member of the PhD Program Faculty or a Doctoral Affiliate Faculty member as a co-chair with an program faculty member. The selection and/or invitation of a dissertation Chair should be discussed in consultation with the Program Director. The dissertation Chair will guide the student in formulating their dissertation committee and through the dissertation process. Chairs must be familiar with PHS PhD policies and procedures, and must have content or methods expertise to contribute to the dissertation research. Students must work with their Chair to identify other potential committee members who will provide relevant expertise to the dissertation research project.

Forming a Doctoral committee – The dissertation committee consists of at least 5 members. All members must have a Graduate Faculty appointment at UNC Charlotte. At least three, including the Chair, must be from the PhD Program or Participating faculty. The fourth member must be from outside the Department of Public Health Sciences. Members from the larger university and professional practice community are encouraged but not required. The fifth member is appointed by the Graduate School. The committee guides the student in refining the dissertation topic, the development and defense of the dissertation proposal, ensuring scientific rigor of the research, conducting the dissertation research, writing the dissertation, and the dissertation defense. Committee members should reflect both content and methods expertise needed for the student to complete the research.

Writing the dissertation proposal – The student in conjunction with the dissertation committee will agree on the dissertation topic. The dissertation proposal typically consists of the first 3 chapters of the dissertation: 1) introduction to the problem including the importance of the problem, significance of the proposed research, the research question and hypotheses; 2) conceptual model and literature review; and 3) a detailed methods section including sampling, recruitment, measures, data analysis, and limitations. The student with the guidance of the dissertation Chair should work with each committee member individually

to develop the scope and direction of the dissertation. The student should provide the overall idea for the dissertation including major concepts to be investigated, measures to be used, and strategy for primary or secondary data analysis. Committee members work with the student to establish the rationale for the project, refine the scope and ensure feasibility of the dissertation research project.

Defending the dissertation proposal – Students, with the permission of the Chair, will schedule their proposal defense. The proposal defense is an open session presentation to the student's dissertation committee and PHS department students and faculty. Committee members must receive the final dissertation proposal at least 2 weeks prior to the proposal defense date. It is also at this time that students will indicate their preferred dissertation format – either the "traditional" 5-chapter model, or the 3 manuscript model. Students will make a 20-30 minute presentation summarizing the research proposal. The audience will ask questions, and after the student has responded to their questions, they will be excused. Committee members will then ask questions about the proposed research plan. Successful defense of the dissertation proposal advances the student to doctoral candidacy. Approval of the dissertation proposal constitutes a contract between the student and the committee. Any substantive changes in scope, research questions or hypotheses, analytic approach or format requires the full agreement of the committee and could necessitate another proposal defense. Any student who fails the dissertation proposal defense may petition the PhD Program Advisory Committee one time for the opportunity to redefend the dissertation proposal. A student who fails the proposal defense a second time will be terminated from the PhD program.

Conducting the dissertation research – Students will plan, conduct, analyze, and interpret an original research project as described in the research proposal. Regardless of whether students collect primary data or analyze secondary data, they must follow all applicable protocols for Human Subjects Protection.

Writing the Dissertation – The dissertation is a substantive product documenting the student's original research, findings, and conclusion. The standard format is a 5 chapter model: Introduction including background and significance; conceptual model and literature review; methods; results; discussion and conclusion. Students may also follow the 'three paper or manuscript' format, which consists of: an introductory chapter that outlines the area of research and the manuscripts that follow, followed by three complete publishable manuscripts, and concluded with an integrating/synthesizing chapter that emphasizes findings and themes across the papers and research and practice implications. Students are encouraged to work with their dissertation Chair as a primary reader, sharing multiple drafts of individual chapters. Students should work with their committee members as methods and content experts in reviewing drafts of the dissertation chapters.

Defending the dissertation – The dissertation defense is scheduled when the dissertation Chair and the student concur that the student has a final product that meets with initial committee member approval. The dissertation defense is a public research presentation open to the UNC Charlotte academic community. The student makes a formal presentation of the research, the findings, the results, and the interpretation and implications. Non-committee, audience members may ask questions. When these questions are concluded, the audience will be asked to leave, and the committee members will engage in asking questions. When all

questions have been put forth, the student will be excused and the committee will make its determination. The outcome of the exam is pass or fail. A passing evaluation might include conditions for revisions prior to the final acceptance of the dissertation. Any student who fails the dissertation defense may petition the PhD Program Advisory Committee one time for the opportunity to redefend the dissertation. A student who fails the dissertation defense a second time will be terminated from the PhD program.

Program progress

Doctoral students and candidates are evaluated annually to ensure that they are making sufficient progress to complete the degree in a timely manner. This evaluation is especially important during the dissertation process when students have less programmatic interaction and structure as they work more independently conducting their dissertation research. Each year students will complete a checklist of scholarly activities and submit their curriculum vitae. ***Please consult the Public Health Sciences PhD Student Handbook for further details.***

Time Limits for Completion

- Students must pass all sections of the comprehensive exam within 1 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 6 months of passing the comprehensive exam.
- Students must pass their dissertation defense within 5 years of the proposal defense, but not later than the end of their 8th year following matriculation as a doctoral student.
- Students must complete their degree, including the dissertation, within 8 years of first registering as a doctoral student.

UNC Charlotte Residency Requirement

Residency requirements for the program include completing 21 hours of continuous enrollment, either as course work or dissertation credits. Residence is considered to be continuous if the student is enrolled in one or more courses in successive semesters until 21 hours are earned.

COURSES IN PUBLIC HEALTH SCIENCES

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*)

HLTH 8000. Special Topics in Public Health Sciences. (1-4)

Pre/Co-requisites: none. Courses in selected topics and advanced studies in public health sciences. May be repeated for credit as topics vary. Lecture hours will vary with the courses taught. (*On demand*)

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 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)
Pre/Co-requisites: 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 8281/6281. Measurement and Scale Development. (3)
Pre/Co-requisites: 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*)

HLTH 8282. Health Survey Design and Research. (3)
Pre/Co-requisites: 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 8270/HSRD 8110. Applied Biostatistics: Regression. (3)
Pre/Co-requisites: 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)
Pre/Co-requisites: 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 8600. Seminar in Public Health Sciences. (1-6)
Pre/Co-requisite: Instructor permission. Seminar in selected current topics and advanced studies in public health. May be repeated for credit as topics vary. (*On demand*)

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)
Pre/Co-requisites: none. 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 8260/HSRD 8003. Analytic Epidemiology. (3)
Pre/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 8272/HSRD 8103. Large Data Sets and Health Services Research. (3)
Pre/Co-requisite: 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 PhD in Health Services Research or the PhD in Public Health Sciences program or permission of the instructor. *(Spring)*

HLTH 8800. Independent Study in Public Health Sciences. (1-6)
Pre/Co-requisite: Full graduate standing in the PhD in Public Health Sciences program and permission of instructor. Offered on a pass/fail basis only. (*on demand*)

HLTH 8901. Dissertation Research. (1-9)
Pre/Co-requisite: 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)
Pre/Co-requisite: 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. (*Fall, Spring, Summer*)

The PhD in Public Health Sciences focuses on training doctoral level researchers in the discipline of health behavioral research as it relates to primary, secondary and tertiary prevention of disease and disability. The framework underlying the outcomes and competencies of this behavioral training is largely adopted from the American Academy of Health Behavior (AAHB) outcomes of doctoral level training (American Academy of Health Behavior Work Group on Doctoral Research Training, 2005). However, there is considerable overlap between the AAHB and the American Schools of Public Health (ASPH) DrPH competency development project model (ASPH, 2009). These 8 outcomes guide the proposed PhD in Public Health Sciences in the Dept of Public Health Sciences. They determine the breadth and depth of knowledge that students must obtain to graduate with a doctoral degree. Doctorally trained researchers from our programs will:

1. Possess substantive knowledge of the field
2. Think theoretically and critically
3. Frame significant research questions
4. Establish research partnerships with the community [and other researchers]
5. Design research
6. Collect and analyze data
7. Communicate with various audiences about research
8. Model professional and ethical conduct

These 8 outcomes form 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 CEPH accreditation (Council for Education in Public Health).

Literature cited

American Academy of Health Behavior Work Group on Doctoral Research Training. (2005). A vision for doctoral research training in health behavior: A position paper from the American Academy of Health Behavior. *American Journal of Health Behavior*, *29*(6), 542-556.

Association of Schools of Public Health [ASPH]. (2009). DRPH Competency development project model: Version 1.0.

1. PhD Core Competency: Possess Knowledge of the Field

	Learning Opportunities
a. Describe the historical foundations of public health, health behavior, health promotion, and health education	HLTH8200
b. Apply major and emerging theories of health behavior within the context of a social ecological framework	HLTH8220
c. Describe how culture and health behaviors influence health disparities [PHS]	HLTH8223, 8220
d. Describe the research on risk and protective factors associated with the major sources of human morbidity and mortality	HLTH8223, 8202
e. Discuss the outcomes of major preventive interventions	HLTH8220
f. Discuss major controversies in public health policy	HLTH8200, 8223

2. PhD core Competency: Think Critically and Theoretically **

a. Distinguish conceptual or analytic issues from empirical issues	HLTH8221, 8201
b. Understand different theoretical perspectives and what each illuminates and obscures	HLTH8220
c. Read broadly, in other fields, seeking connections that are not at first obvious	HLTH8223
d. Explain problems in the field using theory	HLTH8220
e. Produce a synthesis of the research literature on a topic	HLTH8223
f. Compare different ways of knowing	HLTH8221, 8223, 8201
g. Compare across research methods and allied philosophical traditions	HLTH8281, 8221

3.PhD Core Competency: Frame Significant Questions

a. Demonstrate expert knowledge of the research literature on a topic	HLTH8223, 8602
b. Identify knowledge gaps of public health significance	HLTH8201, 8220, 8601, 8223
c. Identify the inadequacies in existing measurement instruments and procedures that need to be challenged	HLTH8282, 8281, 8220
d. Specify causal processes	HLTH8201, 8274*
e. Formulate clear research questions	HLTH8201, 8221
f. Formulate a testable hypothesis or hypotheses	HLTH8201
g. Identify critical elements of a research problem	HLTH8221, 8201

4. PhD Core Competency: Partner with the Community **

a. Build trusting relationships with people and groups in the community[1] who work on a health problem and have been affected by it	HLTH8221, 8222†
b. Understand how the profession and its research is viewed in the community	HLTH8601, 8221, 8222†
c. Connect one's research to the work of practitioners and community members in the field	HLTH8601, 8221, 8222†
d. Collaborate with other disciplines in the community	HLTH8221, 8222†
e. Build upon strengths and resources in the community	HLTH8221, 8222†
f. Ground research questions in practice, reflective of the needs of and priorities of the community, as well as theory	HLTH8601, 8201, HLTH8221, 8222†
g. Engage communities as partners in the research process	HLTH8601, 8221, 8222†
h. Communicate research findings in ways that lay people can understand	HLTH8601, 8602

[1] Community may also refer to the broader academic community as well as policy makers

5. PhD Core Competency: Identify Appropriate Methods of Inquiry

a. Identify threats to validity in quantitative and qualitative designs	HLTH8221, 8222, 8201
b. Align researchable problems with appropriate methods of inquiry	HLTH8221, 8201
c. Identify useful sources of data	HLTH8221, 8201
d. Identify novel approaches to address research questions	HLTH8221, 8201
e. Explain the advantages and disadvantages of different sampling strategies	HLTH8201, 8221
f. Identify independent and dependent variables when appropriate	HLTH8201, 8270, 8271
g. Articulate the strengths and weaknesses of various methods of inquiry, including those selected for use in an investigation	HLTH8221, 8222, 8201, 8601

6. PhD Core Competency: Collect and Analyze Data

a. Develop standardized research protocols for primary data collection in the field using quantitative, qualitative, and mixed methods	HLTH8221, 8201, 8282
b. Assemble secondary data from existing public and private sources to address research questions	HLTH8602, HLTH8272*
c. Understand methods of analyzing both quantitative and qualitative data	HLTH8222, 8281, 8270, 8271
d. Develop quantitative measures to assess theoretical constructs	HLTH8281
e. Develop psychometrically sound quantitative measurement tools	HLTH8281, 8282
f. Select statistical tests based on data structure and statistical assumptions	HLTH8203, 8201, 8270, 8271
g. Use appropriate analytical methods to clarify associations between variables and to delineate causal inferences	HLTH8201, 8203

h. Develop proficiency in using various statistical software packages	HLTH8203, 8281, 8270,8271
i. Interpret quantitative and qualitative data	HLTH8222, 8202, 8270, 8271

7. PhD Core Competency: Communicate Research **

a. Understand characteristics of different audiences	HLTH8601, 8602, 8603
b. Gain experience with different genres and forms of dissemination (e.g. dissertation, empirical article, conceptual analysis, press release)	HLTH8601, 8602
c. Write precisely and plainly for technical and general audiences	HLTH8601, 8602, 8220, 8223
d. Present oral research effectively in professional and public forums	HLTH8601, 8602, 8603
e. Present findings to community members that are culturally appropriate	HLTH8601, 8602, 8603

8. PhD Core Competency: Model Professional and Ethical Conduct **

a. Demonstrate/understand the parameters of professional practice	HLTH8601, 8201
b. Apply principles of responsible conduct of research (RCR)	HLTH8601
c. Develop research protocols and materials that protect the privacy of individuals and communities involved in health research **	HLTH8601
d. Demonstrate cultural sensitivity in ethical discourse and analysis **	HLTH8601, 8201
e. Understand issues of individual autonomy versus protection of public welfare in designing and conducting health research **	HLTH8601
f. Work in collaborative multi disciplinary teams	HLTH8602, 8221, 8222, 8200
g. Demonstrate teaching skills and experience	HLTH8603

* Currently an elective
** Consistent with ASPH DrPH core competency
† Tentative qualitative sequence

UNC CHARLOTTE
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March 16, 2011

Vivian B. Lord, PhD
Interim Chair, Department of Public Health Sciences
University of North Carolina Charlotte
9201 University City Boulevard
Charlotte, NC 28223-001

Dear Dr. Lord,

This letter is to enthusiastically support the proposed Ph.D. in Public Health Sciences with a concentration in Behavioral Sciences within the Department of Public Health Sciences. As the Director of the Health Services Research (HSR) Ph.D. program housed within the College of Health and Human Services, I can speak directly to the important benefits that this proposed Ph.D. program will bring to HSR students and to the college.

I see many synergies between the proposed Ph.D. and the HSR Ph.D. program. First, key quantitative research methods classes will overlap. These classes are currently delivered by PHS faculty. Typically the class size is from three to ten students; thus class discussions will be enriched by more students and this arrangement will be a more efficient use of faculty resources. Second, the Ph.D. in Public Health Sciences will offer new doctoral classes that can serve as electives for HSR students. Courses such as measurement and scale development, survey research design, the professional seminar series, and the two course qualitative sequence will be popular electives with HSR students. Third, having a larger cohort of doctoral students in the college to create a sustainable doctoral culture will aid students to share cross-cutting ideas related to behavioral sciences and health services research. For example, examining the role of patient-physician communication and health outcomes in the hospital setting would combine both behavioral science approaches and clinical outcomes.

To facilitate the proposed program and curricular development, I further support the cross-listing of the following HSRD classes as HLTH doctoral classes:

HSRD8101/HLTH 8201, Introduction to Quantitative Research Design
HSRD8003/HLTH 8260, Analytic Epidemiology
HSRD8110/HLTH 8270, Applied Biostatistics: Regression
HSRD8111/HLTH 8271, Applied Biostatistics: Multivariate
HSRD8272/HLTH 8272, Large Data Sets and Health Services Research

In short, I fully support this proposed Ph.D. program as it will offer many benefits to doctoral students, faculty, and the existing degree programs within our college.

Sincerely,

Laura Talbot

Laura Talbot, PhD, EdD, RN, GCNS-BC
Director, Health Services Research Ph.D. Program
College of Health and Human Services

Curriculum for PhD in Public Health Sciences with a Behavioral Science Concentration (minimum 63 credit hours)

The PhD in Public Health Sciences is designed to be a post master's curriculum. Students who graduated with an MPH or MSPH degree from a CEPH accredited program or school are assumed to have met the required prerequisite foundation courses. Students entering with a master's degree in a field other than public health must complete the Required Prerequisite Foundation courses in Public Health in the first year of starting the program in consultation with the PhD Director and/or Advisor. Courses marked with an * are new courses to be developed.

Required Prerequisite Foundation courses in Public Health (9 credits)

*HLTH 6200	Introduction to Public Health [Fall]
HLTH 6202	Community Epidemiology (introductory epidemiology) [Fall & Spring]
HLTH 6203	Public Health Data Analysis (introductory biostatistics) [Fall]

Core Public Health Courses (24 credit hours):

Methods (15 credit hours)

HLTH 8201/HSRD 8101	Introduction to Quantitative Research Design (3)
HLTH 8281/6281	Measurement and Scale Development (3) or OSCI 8207 Psychometrics [Alternate Spring]
*HLTH 8282	Health Survey Design and Research (3) [Alternate Spring]
HLTH 8270/HSRD 8110	Applied Biostatistics: Regression (3) [Yearly; prereq 6203]
HLTH 8271/HSRD 8111	Applied Biostatistics: Multivariate (3)

Professional Seminars (9 credit hours)

*HLTH 8601	Ethics in the Public Health Profession (3) [Alternate years]
*HLTH 8602	Communicating and disseminating Research (3) [Alternate years]
*HLTH 8603	Teaching portfolio (3) [Spring]

Concentration in Behavioral Sciences Courses (12 credit hours)

*HLTH 8220	Theories and interventions in Behavioral Science (3) [Spring]
*HLTH 8221	Theory Generation in Behavioral Sciences (3) [Fall, prereq 8220]
*HLTH 8222	Theory Generation and Analysis in Behavioral Sciences (3) [Spring; prereq 8221]
*HLTH 8223	Social Determinants of Health (3) [Fall]

Specialty content focus (9 credit hours) – Specialty content areas will be determined in consultation with the doctoral student's advisor and make use of expertise and course offerings around the UNC Charlotte campus. Specialty areas can focus on a specific population (e.g. older adults/gerontology or maternal & child health [MCH]), a health issue (e.g. AIDS), or approach (e.g. psychology). Ideally each specialty area would cover literature related to: health and social

policy issues, epidemiology of a health condition/population, relevant theories or approaches related to the condition/population, and/or current topics in the area. Course work must be at the 6xxx/8xxx level.

Dissertation (minimum 18 credit hours)

Electives for Public Health Sciences (optional)

HLTH 8260/HSRD 8003 Analytic Epidemiology (3)
HLTH 8272/HSRD 8103 Large data sets and Health Services Research (3)

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 PhD program limits master's level transfer credits to at most 6 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 PhD Program Director, in conjunction with Program Faculty, approves graduate level transfer credits. Students must apply for transfer of graduate levels courses within the first year of enrollment, or within one semester following completion of the course if taken during the PhD 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 PhD 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.

Course sequencing for PhD Students - Note: Grayed areas indicate where different cohorts of students overlap		
	Course sequence for students admitted with an MPH or MSPH	**Course sequence for students admitted <u>without</u> an MPH or MSPH**
Year 1 Fall	HLTH 8201, Introduction to Quantitative Research Design (3) HLTH 8223, Social Determinants of Health (3) HLTH 8601, Ethics in the Public Health Profession (3)	HLTH 6200, Introduction to Public Health (3) HLTH 6202, Community Epidemiology (3) HLTH 6203, Public Health Data Analysis (3)
Year 2 Spring	HLTH 8220, Theories and Interventions in Behavioral Science (3) HLTH 8270, Applied Biostatistics: Regression (3) HLTH 8603, Teaching portfolio (3)	HLTH 8220, Theories and Interventions in Behavioral Science (3) HLTH 8270, Applied Biostatistics: Regression (3) HLTH 8603, Teaching portfolio (3)
Year 2 Fall	HLTH 8221, Theory Generation in Behavioral Sciences (3) HLTH 8271, Applied Biostatistics: Multivariate (3) Specialty elective (3)	HLTH 8201, Introduction to Quantitative Research Design (3) HLTH 8221, Theory Generation in Behavioral Sciences (3) HLTH 8223, Social Determinants of Health (3)
Year 2 Spring	HLTH 8222, Theory Generation and Analysis in Behavioral Sciences (3) HLTH 6281/8281, Measurement and Scale Development (3) HLTH 8282, Health Survey Design and Research (3)	HLTH 8222, Theory Generation and Analysis in Behavioral Sciences (3) HLTH 8282, Health Survey Design and Research (3) Specialty elective (3)
Year 3 Fall	HLTH 8602, Communicating and Disseminating Research (3) Specialty elective (3) Specialty elective (3)	HLTH 8271, Applied Biostatistics: Multivariate (3) HLTH 8601, Ethics in the Public Health Profession (3) HLTH 8602, Communicating and Disseminating Research (3)
Year 3 Spring	HLTH 8901, Dissertation Research (1-9)	HLTH 6281/8281, Measurement and Scale Development (3) Specialty elective (3) Specialty elective (3)
Year 4 Fall	HLTH 8901, Dissertation Research (1-9)	HLTH 8901, Dissertation Research (1-9)
Year 4 Spring		HLTH 8901, Dissertation Research (1-9)

Appendix F - Course Scheduling

Course Number	**Name**	**Schedule**
HLTH 6200	Introduction to Public Health (3)	Fall or Summer
HLTH 8201	Introduction to Quantitative Research Design (3)	Fall
HLTH 8220	Theories and Interventions in Behavioral Science (3)	Spring
HLTH 8221	Theory Generation in Behavioral Sciences (3)	Fall
HLTH 8222	Theory Generation and Analysis in Behavioral Sciences (3)	Spring
HLTH 8223	Social Determinants of Health (3)	Fall
HLTH 8260	Analytic Epidemiology (3)	Alternate Fall
HLTH 8270	Applied Biostatistics: Regression (3)	Spring
HLTH 8271	Applied Biostatistics: Multivariate Methods (3)	Fall
HLTH 8272	Large Data Sets and Health Services Research (3)	Spring
HLTH 8281	Measurement and Scale Development (3)	Alternate Spring
HLTH 8282	Health Survey Design and Research (3)	Alternate Spring
HLTH 8601	Ethics in the Public Health Profession (3)	Alternate years
HLTH 8602	Communicating and disseminating Research (3)	Alternate years
HLTH 8603	Teaching portfolio (3)	Spring
HLTH 8800	Independent Study in Public Health Sciences (1-6)	Fall, spring, summer
HLTH 8901	Dissertation Research (1-9)	Fall, spring , summer

J. MURREY ATKINS LIBRARY
LIBRARY CONSULTATION FOR
COURSE AND/OR CURRICULUM PROPOSAL

Date: February 2, 2011

To: Dr. Jan Warren-Findlow

From: Jean Hiebert, Health and Human Services Librarian

Library Collection Evaluation:
The adequacy of library holdings to support the proposed Ph.D. in Public Health Sciences (Behavioral Sciences concentration) program is evaluated by the Reference Librarian as follows:

1. Holdings are superior: _____
2. **Holdings are adequate: ___X_____**
3. Holdings are adequate only if department purchases additional materials: _____
4. Holdings are inadequate: _____

Comments:
Health and Human Services Librarian Jean Hiebert has completed a thorough evaluation of Atkins Library resources with regard to journals, databases, reference resources, and circulating books that are relevant to the Public Health Sciences Ph.D. program. Ms. Hiebert finds that the Library has sufficient resources to support this new program.

A. Journals

ISI's "Journal Citation Reports" lists journal titles relevant to the proposed PhD under separate categories including Public, Environmental, and Occupational Health; Social Science, Biomedical; Geriatrics & Gerontology and Psychology. (Please see attached tables of titles and library holdings.) Atkins Library has access to all but 2 of the top 82 titles in Social Sciences, Biomedical and Public, Environmental and Occupational Health. Of the remaining 21 selected titles that fall into Psychology and Geriatrics & Gerontology, Atkins Library has access to all but one title (95%). Individual journal articles that are not available in-house may be requested through the Library's Interlibrary Loan Service.

B. Databases

Students and faculty engaged in studies relevant to the proposed program will find they use a wide range of databases. Below is a list that is grouped by category.

Category	**Database**	**Coverage**
Public Health	Medline via Pub Med	Mid-1960's+
	Medline via Cambridge Scientific Abstracts	1992+
	Science Direct	1995+
	Web of Science	1970+
Psychology	PsycInfo	1887+

	PsycARTICLES	1985+
	Sage Journals Online	Varies by title
	Wiley Online Library	1997+
Gerontology/Reproduction	Social Services Abstracts	1980+
	Sociological Abstracts	1963+
	CINAHL	1983+
	POPLINE: Reproductive Health Literature	1970+
Miscellaneous	Dissertation Abstracts	1980+
	Academic Search Premier	1975+
	BioMed Central	Varies by title

C. Books

By selected subject headings

Aging (228; 15 since 2005)
- Health behavior aging factors (5; 0 since 2005)
- Age factors in disease (13; 1 since 2005)
- Population aging (5; all since 2005)
- Longevity (60; 3 since 2005)

Epidemiology (103; 16 since 2005)
- Public health surveillance 13; 3 since 2005)
- Health behavior (74; 9 since 2005)
- Health attitudes (13; 1 since 2005)
- Health behavior age factors (5; 0 since 2005)

Human reproduction (35; 0 since 2005)
- Human reproduction – social aspects (15; 5 since 2005)

Medicine and Psychology (105; 2 since 2005)

Public health (90; 15 since 2005)

Titles not owned by Atkins Library may be requested through Interlibrary Loan.

Conclusion:

Atkins Library holdings with regard to journals, databases and circulating books are sufficient to support this Ph.D. program. It is suggested that the participating academic departments continue ordering new resources, as they are published, in the subject areas designated above.

Public Health Behavioral Sciences (PHBS) PhD Planning Meeting

October 12, 2010

1 PM to 2:50 PM

Present: Mitch Cordova (HSR & BIOL), Owen Furuseth (GEOG), Virginia Gil-Rivas (IHP), Vivian Lord, David Swindell (PPOL), Jan Warren-Findlow

Absent*: Laura Talbot, Linda Shanock (ORG), Suzanne Boyd, Jim Laditka and Gwen Foss

Introduction: Jan briefly described the planning of the PHBS PhD proposal including its status of authorization to plan to establish. She also briefly described the overall goal supported by the University administration of a School of Public Health and what it entails (e.g. number of degree programs, faculty required). Jan then stated that the PhD will be located within Public Health (an accreditation mandate); however, it is a doctoral program within UNC Charlotte and collaboration with other PhD programs and directors was critical for its successful implementation. The goal of the meeting was to get input from those who had established PhD programs in how to run a successful program, but also to explore ways that the PhD program might be collaborative with other related programs.

The meeting had a specific agenda and all of the items were covered, but the participants had a free-flowing conversation that did not necessarily follow agenda item by agenda item. The following is a summary of the discussion points:

1. Mitch stated the clear need to differentiate PHBS from Health Services Research (HSR) and also to differentiate from the Health Psychology (IHP) Community Track. Jan stated that HSR is about outcomes within the health care services system (patient outcomes). PHBS is broader – deals with population and community health and this PhD is more about behaviors that affect health and the determinants of those behaviors. HSR has no theory; PHBS is very theory-based – training students to use and advance theory related to social determinants and behavioral health. Virginia noted that while there were some similarities in the IHP Community Track, she mainly saw a number of areas that the PHBS and IHP programs could complement each other, e.g. provide electives that each program needed for its students.
2. The represented PhD programs differed in their full-time to part-time mix of students. IHP is going totally FT (currently have 31 funded students, mostly from grants). PPPOL is now 3:1, FT to PT. There are pluses and minuses to each approach – PT is to be expected as a beginning program and it allows for more overall students and PT students will pay; however, it is more difficult to have a cohort, schedule classes or fill classes.
3. All 5 programs (IHP, Biology, HSR, Geography & PPOL) have students teach either as a requirement or an option. Biology requires it starting 1st semester. IHP has them take a course on teaching psych followed by a practicum and only then do they teach an introductory psychology course. Some students participated in the recent teaching fellowship program where they took teaching workshops through the CTL and then developed a course and taught during second summer. Students are able to receive summer funding. There was a discussion about using student teaching to justify their existence as they generate student credit hours (Mitch) but Owen said it's cheaper to hire adjuncts.
4. Suggestion was to start with a cohort – in fall.
5. Budgeting for students: budget for tuition, fees, stipend. It is important to show how over time you'll grow your own stipend and tuition dollars through grants & contracts. Sounds like GASP

funding is uneven from year to year and directors don't always get a timely notification about it, which can hamper student recruitment. Mitch suggested external funding calculations should be a minimum of $18K per student per year. David stated that it is important to have sufficient external funding and future planning for increases in external funding so that the masters programs are not cannibalized. Currently GASP is funding almost no masters' GAs in order to continue their funding commitments to doctoral GAs. Take away message that we don't want to undercut whatever budget amount we request.

6. Admissions : Geography & Biology only take on students that a faculty member agrees to work with. IHP circulates student files to all faculty. PPOL has an admission committee.
7. Steering/advisory committee: handles program issues, curriculum, evaluates the program director, and student admissions. Has alumni representation and/or current student representation (e.g. IHP has 1 student rep from each track). We didn't discuss level or composition of the steering committee. PPOL has 1 person from each dept involved in the program on their steering committee. IHP has some non-tenured people on their steering committee as does PPOL.
8. Program Directors : some are 9 month, some are 12 month. Must be a builder, should have an established research agenda that will be on auto-pilot. Sounded like these directors were actively helping to fund doctoral students with research. All of the directors emphatically stated that the program must have its own administrative support.
9. Dissertation committee make-up: PPOL – dissertation Chairs must be tenured. Importance to students because senior faculty have connections and credentials that will help the students as they explore academic positions. Virginia said chairs in IHP tended to be junior faculty because senior faculty didn't want the work of mentoring. Faculty should be limited in how many committees they can chair/serve on and there should be incentives. Political Science, a major contributor of PPOL, has a point system, e.g. so many committees equal increase merit. Geography has salary increase or teaching loads adjusted (they have research and teaching tracks for faculty). HSR ensures that faculty must have sat on a dissertation committee for a student who has graduated before they can chair one.
10. Mitch believes that hard $$ doctoral student GAs should be assigned to senior faculty not junior faculty. Junior faculty should be helped in other ways to be successful. Faculty with $$ should choose the student they want to work with (Mitch, Virginia).
11. Recruiting students – listservs, conferences, GRE list, mailing list of feeder programs. Bring them in for interviews whenever possible – UNCC sells itself (David). There may be some grad school money to bring them on campus. The PhD needs to have a clear vision (Virginia).
12. Curriculum: discussion about resources to deliver curricula especially with another PhD in Epidemiology coming in the future.
13. There is a pending survey about the need to compile the advanced statistical courses offered across campus: important tools that wouldn't need to be program specific. Specific prerequisites could still be a problem. Some concerns about students not being able to translate concepts and techniques to their specific discipline.

*Jan will meet individually with these representatives.

10/12/10 Meeting with Laura Talbot (HSR Director). Dr. Talbot was very helpful and enthusiastic about the program. She emphasized the need for students to learn to write grants and get funding for their education and their research. She used the example of NRSA grants for doctoral students as being a

feasible vehicle for students to get funding. We also preliminarily discussed cross-listing several HSRD courses with HLTH.

10/15/2010 Meeting with Gwen Foss, who is putting together the Nursing DNP proposal. She recommends including a table of diversity objectives for each course in the long form proposal. Also include the competency matrix and the AAHB document that it is based on. Program faculty for the DNP will be doctorally prepared but not necessarily tenured. In her experience, Dr. Foss recommends that a commitment to support disadvantaged or minority students requires 1 dedicated faculty member who will work with and mentor those students to be successful.

10/26/2010 Meeting with Linda Shanock – Org. Science has both an associate director and a director. Both are 9 month appointments. The Director has a 2 course buyout, associate has 1 course buyout (normally their faculty are on a 2-2 load). Both receive a summer supplement/stipend. She recommends that for an interdisciplinary program, that the director must be a tenured full professor as they have to deal with multiple department chairs and report to multiple deans.

For their program faculty, the only requirement is a graduate faculty appt. Asst, assoc & full professors can all chair dissertation committees. They use the 5 chapter dissertation model. They strongly encourage students to have 3-4 pubs upon graduation with 1-2 where they are 1st or 2nd author.

The admissions committee is 3 people from program faculty with different depts. represented. They have full autonomy to decide the class. Cohort model with fall starts; all students are full-time. They have 22 full-time students, with 14 faculty. This is a post-bachelors program.

No release time for chairing a dissertation committee or being on the admissions committee. They recommend that no faculty member take on more than 2 students, only 1/year.

Curriculum – The expectation is that they will expose students to multiple perspectives but the student will ultimately pick 1 specialty as a focus. They would need to do that for pubs, jobs, etc… They have a specialized qualifying exam. Student assembles an exam committee and a reading list. Student and faculty generate possible exam questions – essay exam. The same committee goes on to be the student's dissertation committee.

Funding – currently no Org. Sci. students are funded on grants. They shop students out as GAs throughout the university as consultants (HR, space planning, etc…). Some do GAs offsite for businesses – cheaper than company hiring a consultant. Dr. Rogelberg is very creative in getting this kind of funding. Their students are "useful".

Some students do teach but they have no specific teacher training. They took advantage of the university's summer program.

They are training 50/50 academic/practitioners.

UNC CHARLOTTE

Health Psychology (HPSY) Ph. D. Program
College of Liberal Arts and Sciences

June 27, 2011

Vivian B. Lord, Ph.D.
Interim Chair, Department of Public Health Sciences
University of North Carolina, Charlotte

Dear Dr. Lord:

It is my pleasure to provide this letter of support for the proposed Ph. D. Program in Public Health Sciences in the Department of Public Health Sciences at UNC Charlotte. As the Director of the Health Psychology Ph. D. Program housed in the College of Liberal Arts and Sciences, I believe that the establishment of this program can contribute to the development of potentially fruitful research and training collaborations between our programs.

The proposed program can contribute to strengthening the health-related educational programming offered at UNC Charlotte. Specifically, the program's concentration on social and cultural factors that contribute to health behaviors and health outcomes is particularly relevant to the training and research of doctoral students in Health Psychology as many of our students are interested in the development of behavioral interventions and treatment programs aimed at addressing the needs of diverse populations. The addition of doctoral courses in the Department of Public Health Sciences will increase the array of courses our students can take to complete their required 15 hours of interdisciplinary training. Further, the creation of this program can contribute to strengthening a research culture within the University that aims to develop and evaluate theories and interventions that have the potential to contribute to eliminating or reducing health disparities. Such a culture can facilitate the development of interdisciplinary research projects, increase faculty's ability to secure federal funding, and the ability of providing innovative training to students in our program.

In closing, I want to reiterate my support for the proposed doctoral program in Public Health Sciences as it has the potential to contribute to strengthening graduate training in health-related sciences.

Sincerely,

Virginia Gil-Rivas, Ph.D.
Director, Health Psychology Ph. D. Program
Associate Professor of Psychology
College of Liberal Arts and Sciences

HLTH 6200
Introduction to Public Health
Fall 20XX
Time: XXXX
Location: XXX

Course Syllabus

This syllabus contains the policies and expectations I have established for HLTH 6200 Introduction to Public Health. Please read the entire syllabus carefully before continuing in this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Unless you are prepared to abide by these policies and expectations, you risk losing the opportunity to participate further in the course.

I will conduct this class in an atmosphere of mutual respect. I encourage your active participation in class discussions. Each of us may have strongly differing opinions on the various topics of class discussions. The conflict of ideas is encouraged and welcome. The orderly questioning of the ideas of others, including mine, is similarly welcome. However, I will exercise my responsibility to manage the discussions so that ideas and argument can proceed in an orderly fashion. You should expect that if your conduct during class discussions seriously disrupts the atmosphere of mutual respect I expect in this class, you will not be permitted to participate further.

The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class and/or at the MOODLE site for this course.

Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations.

HLTH 6200 Introduction to Public Health (3 credits, graduate)
Pre/Co-requisites: none;
Time: XXXX
Location: XXXX
Instructor contact information; office hours, etc

Course Description (Catalog)
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. **Pre/Co-requisites**: none

This course contributes to the following Public Health Sciences PhD and MSPH program competencies:

- Describe the historical foundations of public health, health behavior, health promotion, and health education
- Discuss major controversies in public health policy
- Work in collaborative multi disciplinary teams

Course Objectives.
This course is designed as an introduction to the diverse field of public health. This general interest course serves as a pre-requisite for Public Health Sciences PhD students not having a public health background and as an orientation to public health for interested graduate students.

1. The student will demonstrate knowledge of the breadth of issues and disciplines which define public health.

   Assessment: Student will complete a brief (individual) written assignment describing a range of public health problems [5%]

   Assessment: Student will complete an in-class examination [10%]

2. Individually and as a group, students will understand and critically apply a six-step problem solving paradigm to a public health problem:
   - *Define the problem*
   - *Measure the magnitude of the problem*
   - *Understand the key biological, developmental, socio-cultural, behavioral, and environmental determinants*
   - *Identify and develop intervention and prevention strategies*
   - *Set priorities and recommend policies*
   - *Understand barriers to implementation and consider evaluation strategies.*

Concepts of importance are: problem definition; descriptive epidemiology; identifying risk groups/factors; identifying a broad spectrum of plausible strategies; differentiating among primary, secondary and tertiary prevention; understanding practical constraints; the role of advocacy, cultural diversity, human rights and ethical considerations; and incorporating evaluation into designs.

Assessment: Students complete a take-home assignment (individual) outlining

the application of the paradigm to several public health problems. [5%]

Assessment: Students will complete in-class discussion exercises (individual [15%] & group [15%]). Each exercise will have specific sub-objectives.

Assessment: As part of a group, students will prepare a 10 minute presentation [5%] and a 7 page paper [15%] critically applying the problem solving paradigm to a public health problem of relevance to a defined population.

Assessment: Student will individually prepare a brief written critique of another group's paper and presentation. [10%]

Assessment: Student will complete an in-class written examination. [20%]

Assessment: Students will critically evaluate the content, organization, and implementation of the unit as part of the formal course evaluation process. [ungraded]

3. Students will understand and practice group process, team building, facilitation, and presentation skills.

Assessment: Students will provide constructive feedback reflecting on their own and their group's (collectively and individually) functioning.

Assessment: Students will receive constructive feedback from the instructor and from peers during in-class exercises. [ungraded per se]

Instructional Methods

To illustrate the problem solving process in relation to a problem whose impact manifests itself at different periods in the life cycle and in different cultures, a selected public health topic will be discussed in detail.

The course will consist of lectures, student discussions, and problem-solving exercises. The problem-solving exercises will supplement the lectures and develop skills in small group process. As part of the small group exercises, each small group will select a public health problem. With the assistance of the course faculty, the group will analyze the problem following the problem-solving process described above. Each student group will produce a comprehensive group written report and a brief [10 minute] presentation. Each individual will be assigned the responsibility of preparing a brief, written critique of another group's written report.

This course is inherently participatory. You must be present (and arrive to class prepared) to benefit from the course and to contribute to your group. As detailed later, a

portion or your grade is based upon participation in individual and group efforts during and outside of scheduled class time. Failing to attend, and/or arriving late and/or not fully contributing will lower scores for these activities.

Timeliness is also important. Items received after the stated deadline will be penalized proportionate to the degree of lateness. Remember: technology is prone to failure at critical times; allow for unexpected delays when planning your assignments. There is no penalty for submitting assignments EARLY!

Please review the grading/scoring criteria and plan accordingly.

Required Texts

Pokras S. *Problem Solving for Teams:A Systematic Approach to Consensus Decision Making*, Revised Edition, Axzo Press, 2006.[ISBN: 1-4188-8913-X]

Schneider MJ. *Introduction to Public Health, 3rd Edition*. Jones & Bartlett: Sudbury, MA, 2010. [ISBN: 978-0-7637-6381-7]

These texts will be supplemented with readings as specified below. Readings/materials not provided to you in class will be available from the course MOODLE site as PDF files, or as otherwise indicated on the syllabus/announced in class.

Grades

Final grades will be based on the following fixed grading scale. TOTAL POSSIBLE: 100 points. Grading Scale:

≥90	A
≥80, <90	B
≥70, <80	C
<70	U

University Policies

Code of Student Responsibility:

"The *UNC Charlotte Code of Student Responsibility* (the Code) sets forth certain rights and responsibilities in matters of student discipline. The Code defines these responsibilities and guarantees you certain rights that ensure your protection from unjust imposition of disciplinary penalties. You should familiarize yourself with the provisions and procedures of the Code" (Introductory statement from the UNC Charlotte brochure about the Code of Student Responsibility). The entire document may be found at this Internet address: **http://legal.uncc.edu/policies/ps-104.html**

Academic Integrity:

Students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity. This code forbids cheating, fabrications, or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student's work is free from academic dishonesty

of any type; and grades in this course therefore should be and will adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction in the course grade. In almost all cases the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office or http://legal.uncc.edu/policies/ps-105.html. Students are expected to report cases of academic dishonesty to the course's instructor.

Note specific to this course: This course involves elements of individual and group assignments. Those assignments where group effort is expected/required are marked as such. (Remember: all members of a group are accountable for assignments submitted by the group.) In some cases, students are asked to discuss collectively, but to summarize in writing individually. In all other cases, students are expected to work independently.

Violations of academic ethics will be strictly enforced and severely punished, with penalties ranging from deductions of points, to a zero for an assignment, to a failing grade for the course (or something more severe if the incident is taken to the Academic Integrity Board).

Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

All students are required to abide by the UNC Charlotte Sexual Harassment Policy (http://www.legal.uncc.edu/policies/ps-61.html) and the policy on Responsible Use of University Computing and Electronic Communication Resources (http://www.legal.uncc.edu/policies/ps-66.html). Sexual harassment, as defined in the UNC Charlotte Sexual Harassment Policy, is prohibited, even when carried out through computers or other electronic communications systems, including course-based chat rooms or message boards.

Religious Accommodation:
It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester http://legal.uncc.edu/policies/ps-134.html. The census date for each semester (typically the tenth day of

instruction) can be found in UNC Charlotte's Academic Calendar (http://registrar.uncc.edu/calendars/calendar.htm).

Course Policies

Cells phones and other technology: The use of cell phones, beepers, or other communication devices is disruptive, and is therefore prohibited during class. Except in emergencies, those using such devices must leave the classroom for the remainder of the class period. Note: During exam situations, use of such devices may be construed as cheating and appropriate measures taken as an academic ethics violation.

Communication. E-mails are generally answered within 24 hours when received during the hours of Monday – Friday, 9am to 4pm. Messages outside these hours will be responded to as soon as is practical.

Attendance Policy: As noted above, class preparation, participation, and attendance are expected: as part of a group, your group members (and their grades) depend upon the full participation of all members. Attendance and preparation will be assessed within the framework outlined above and may include several unannounced brief written exercises ("pop quizzes") and in class exercises throughout the semester. If you will be unable to attend class, you are expected to inform the instructor and the members of your group as soon as is practical. Many assignments are experiential and are not easily 'made up.'

Topic Outline

Session-by-Session Summary *(subject to change)*

Session #	Date	Topic(s)	Assigned Readings/ Assignments *(see below or session-by-session guide for specific articles)*
1		Introduction/Overview; Ecological model; Core Functions;	Schneider, Ch 1-8, 25-26 Articles
2		Essential Public Health Services; Core Competencies and Professional Practice	Schneider 11-14, 19 Articles
3		History of Public Health	Schneider, Ch 9-10, 29-30 Articles
4		Group Process and Team Building ***Lab: Broken Squares & Video Analysis* ***Worksheet #1 due***	Pokras, Parts I-X Notes, Resource PDFs
5		The Problem Solving Paradigm Examples: Disasters; Introduction to the Group Project; Review for Exam 1 **Lab: Video Analysis* (continued)	Schneider, Ch 14, 29 Articles
6		**EXAM # 1** Definition & Measurement Case study: Tobacco	Schneider, Ch 5-8, 15 Articles

Session #	Date	Topic(s)	Assigned Readings/ Assignments *(see below or session-by-session guide for specific articles)*
7		***Lab: AIDS case definition* Exam 1 results	Schneider, Ch 9-10 Articles; lab materials
8		Key determinants; Prevention & Intervention Strategies; Haddon Matrix Case study: Tobacco **Lab: Aviation Safety* ***+AIDS lab write-up due***	Schneider, Ch 13-15, 17 Articles; lab materials
9		***Lab: Arizona Infant Mortality* ***+Aviation Safety write-up due*** ***+Final topic statement due***	Schneider, Ch 18 lab materials
10		Policy & Priority Setting; Advocacy & Evaluation; Case study: Tobacco Review for Exam 2 *Brief Progress Meetings: Group Projects ***+Arizona IMR write-up due***	Schneider, Ch 11,15, 25-27, 30 Articles
11		**Exam # 2** **+Progress Meetings: Group Projects* ***(Brief outline or workplan due)*** ***Worksheet#2 due***	**Exam**
12		*Progress Meetings: Group Projects ***+Draft paper due (at time of progress meeting)*** *Lab: Rehearse Presentations*	
13		***+Papers & Presentation files due – 9:30am*** **Lab: Presentations -1 (4 groups)*	**Papers posted for critique by 3pm**
14		**Lab: Presentations – 2 (3 groups)* Group participation assessments completed (in-class) Course Evaluation	**Critiques due via email by stated deadline**
15		Synthesis/Review in lieu of final **Assignments returned; grades posted**	***Note: Time is TBA per official exam schedule***

Summary of Required Readings (by session) *(note some articles and chapters are listed for several sessions)*

Background for Group Project/Presentation (<u>also for Session 5</u>)

Patton CV & Sawicki DS. The policy analysis process (chapter 2) in *Basic methods of policy analysis and planning, 2nd Edition*. Englewood Cliffs, NJ: Prentice Hall,

pp 21-73, 1993. **[PDF-MOODLE**]

Gostin L, Mann J. Towards the development of a human rights impact assessment for the formulation and evaluation of public health policies. *Health and Human Rights*, Vol. 1, No.1, pp, 59-80, 1994. **[PDF-MOODLE**]

American Public Health Association. *Powerpoint Presentations*. {guide to presenters at the 134th Annual Meeting} www.apha.org/meetings/powerpoint_presentations.htm (accessed 20 June 2006). **[PDF – MOODLE]**

American Public Health Association. *Tips on how to Give an Oral Presentation*{guide to presenters at the 134th Annual Meeting} www.apha.org/meetings/session_presenter_only.htm#TIPS (accessed 26 June 2006). **[PDF – MOODLE]**

Session 1

Schneider, Ch 1-8, 25-26

Grant JP. *Enduring principles, practical lessons, and political will for the 'health for all revolution*.' From Cell to Society: Public Health in the Next Millennium. Address at the Johns Hopkins University School of Hygiene & Public Health, Baltimore, MD, April 23, 1992. **[PDF – MOODLE]**

Institute of Medicine (Committee for the Study of the Future of Public Health, Division of Health Care Services). *The Future of Public Health*. Washington, DC: National Academy Press, pp 1-18; 1988 (Summary and Recommendations) **[PDF-MOODLE]**

McLeroy KR, et al. An Ecological Perspective on Health Promotion Programs. *Health Education Quarterly;* 15 (4): 351-77 Winter 1988. **[PDF-MOODLE]**

McGinnins JM, Foege WH. Actual causes of death in the United States. JAMA. 1993; 270: 2207-2212. **[PDF-MOODLE]**

Session 2

Schneider, Ch 11-14, 19

Public Health Functions Steering Committee, US Department of Health & Human Services. *10 Essential Public Health Services.* www.health.gov/phfunctions.htm (accessed on 23 June 2006). **[PDF – MOODLE]**

Session 3

Schneider, Ch 9-10, 29-30

Hinnman AR. 1889 to 1989: A century of health and disease. *Public Health Reports*, 105(4): 374-380, July-August, 1990. **[PDF-MOODLE]**

Session 4

Pokras S. (all)

Selections on group process issues (in course notes and PDFs on MOODLE)

Session 5

Schneider, Ch 14, 29

Guyer B. A problem-solving paradigm for public health. In Armenian H., Shapiro S., (eds) *Epidemiology and Health Services Research*, Oxford University Press, 1997. **[PDF-MOODLE]**

Example paper **[PDF-MOODLE]**

Background materials listed above for the group project/presentation

Session 6

Schneider, Ch 5-8, 15

World Health Organization. *Manual of the International Statistical Classification of Diseases, Injuries, and Causes, 8th Revision*, pp vii-xiv. Geneva: World Health Organization, 1967 **[PDF-MOODLE]**

Bartecchi CE, MacKenzie TD, Schrier RW. The human costs of tobacco use (part 1 of 2). *New England Journal of Medicine*. 333(13): 907-912, 1994. **[PDF-MOODLE**]*

MacKenzie TD, Bartecchi CE, Schrier RW. The human costs of tobacco use (part 2 of 2). *New England Journal of Medicine*. 333(14): 975-980, 1994. **[PDF-MOODLE**]*

**Note: These articles each have a full color graph which is difficult to discern in black & white. There is an additional PDF file which has those graphs in full color.*

Session 7

Schneider, Ch 9-10

Selik RM, Buehler JW, Karon JM, Chamberland ME, and Berkelman RL. Impact of the 1987 revision of the case definition of acquired immune deficiency syndrome in the United States. *Journal of the Acquired Immune Deficiency Syndrome*, 3: 73-82. **[PDF-MOODLE**]

Update - Impact of the expanded AIDS surveillance case definition for adolescents and adults on case reporting - United States, 1993. *MMWR*, Vol 43, 160-161, 1994. **[PDF-MOODLE]**

Update - Trends in AIDS incidence — United States, 1996. *MMWR*, Vol 46 (37), 861-867, 1997. **[PDF-MOODLE]**

Session 8

Schneider, Ch 13-15, 17

U.S. Centers for Disease Control. A framework for assessing the effectiveness of disease and injury prevention. *MMWR*, Vol. 41, March 27, 1992. **[PDF-MOODLE]**

U.S. Centers for Disease Control. Premature morality in the United States: Public health issues on the use of Years of Potential Life Lost. *MMWR*, Vol. 35, No. 2S, Supplement, December 19, 1986. **[PDF-MOODLE]**

Giovino GA, Henningfield JE, tomar SL, Escobedo LG, Slade J. Epidemiology of tobacco use and dependence. *Epidemiologic Reviews*; 17(1): 48-65, 1995. **[PDF-MOODLE]**

Novotny TE, Romano RA, Davis RM, Mills SL. The public health practice of tobacco control: Lessons learned and directions for the States in the 1990s. *Annual Review of Public Health*, 13: 287-318, 1992. **[PDF-MOODLE**]

The National Committee for Injury Prevention and Control. A History of Injury Prevention. In Injury Prevention: Meeting the Challenge. New York; Oxford University Press, 1989,pp.4-18. **[PDF-MOODLE]**

US Department of Health and Human Services. Strategies to control tobacco use in the United States: A blueprint for public health action in the 1990s. *Smoking and Tobacco Control Monograph No. 1*. US DHHS, National Cancer Institute. NIH Publication No. 92-3316, October 1991. [Introduction, Preface, Chapters 1-2] **[PDF-MOODLE]**

Session 9

Schneider, Ch 18

Session 10

Schneider, Ch 11, 15, 25-27

Patton CV & Sawicki DS. The policy analysis process (chapter 2) in *Basic methods of policy analysis and planning, 2nd Edition*. Englewood Cliffs, NJ: Prentice Hall. **[PDF-MOODLE (previously assigned for Session 5)**]

U.S. Centers for Disease Control. A framework for assessing the effectiveness of disease and injury prevention. *MMWR*, Vol. 41, March 27, 1992. **[PDF-MOODLE /Session 7]**

US Department of Health and Human Services. *The health consequences of involuntary exposure to tobacco smoke: A report of the Surgeon General – Executive Summary*. US Department of Health and Human Services, Centers for Disease Control and Prevention, coordinating Center for Health Promotion, national Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006. **[PDF-MOODLE]**

Califano JA Jr, Sullivan LW. RJR still markets to kids (guest editorial). *Charlotte Observer*, 5 July 2006. **[PDF-MOODLE]**

Sessions 11-12

(None)

Session 13

Assigned paper to critique (available on MOODLE by time/date noted in session-by-session grid)

Graded Elements

Work Sheet #1. Public Health Problem Identification worksheet (5%) [Individual]

This assignment requires the student to begin thinking in a structured fashion about the variety of public health challenge s/he relates to on a daily basis. Students are asked to identify 5 different public health problems. Emphasis is on selecting/describing a problem in a public health context, listing several means of measuring the burden (magnitude) of the problem at a population/community [NOT INDIVIDUAL] level, listing several current actions that are attempting to address the problem, and listing several potential interventions to address the problem.

Correct completion of each cell is worth ¼ point. Correctly completing all 20 cells yields the maximal value of 5 points (5%). This assignment is due at the start of class on the designated date. Submissions received after that time will be marked late, if accepted at all.

Exam#1. In-class examination (10%) [Individual]
The first in-class examination will consist of a variety of question formats (fill-in-the-blank, matching, short answer, brief essay, extended essay). The questions, in terms of content and assessment style, will be consistent with stated course and specific lecture objectives. Students are encouraged to pay close attention to the statement of learning objectives. The exam will cover all prior material, and may include materials from assigned readings not specifically covered in class. The exam accounts for 10% of the final course grade.

Students who will miss the exam (for legitimate reasons) are expected to advise the instructor in advance. If arrangements cannot be made to take the exam in advance, those with legitimate absences will be allowed to sit for a make-up.

Worksheet#2. Problem Solving Outline (Grid) (5%). [Individual]
This assignment builds upon the analytic framework introduced in assignment #1. It requires the student to systematically analyze three public health problems using the problem solving paradigm presented in class. These problems may be revisions to those used in assignment #1 or new problems. It is recommended that the problems be ones, which the student would be interested in pursuing as part of the group project assignment later in the course.

Emphasis is on a) selecting/describing a problem in a public health context (a total of 3 different problems in all), listing several means of measuring the burden of the problem at a population/community level [NOT INDIVIDUAL LEVEL], listing determinants of the problem (e.g., a conceptual framework and/or risk factors/behaviors), listing several current actions that are attempting to address the problem, listing several potential interventions to address the problem, and listing means of evaluating the (short term) success of the recommended intervention.

Correct completion of each cell is worth 1 point, except for the determinants/conceptual model and strategies (potential) cells, which are worth 2 points. Correctly completing all 24 cells yields the maximal value of 30 points. This value is then divided by 6 to scale the score to its value of 5%. This assignment is due at the start of class on the designated date. Submissions received after that time will be marked late, if accepted at all.

Exam #2. In-class examination (20%) [Individual]
The second in-class examination will consist of a variety of question formats (fill-in-the-blank, matching, short answer, brief essay, extended essay). The questions, in terms of content and assessment style, will be consistent with stated course and specific lecture objectives. Students are encouraged to pay close attention to the statement of objectives. The exam will emphasize material since the first exam, but can cover all prior material

(especially material from the first exam where students had difficulty), and may include materials from assigned readings not specifically covered in class. The exam accounts for 20% of the final course grade.

Students who will miss the exam (for legitimate reasons) are expected to advise the instructor in advance. If arrangements cannot be made to take the exam in advance, those with legitimate absences will be allowed to sit for a make-up.

Individual Participation (15%) [Individual]
Individual Participation will consist of two components: attendance (e.g., quantity, 10%) and active contribution during scheduled lab sessions (5%). Attendance points are accrued at 1 point per lab opportunity and there will be a minimum of 13 opportunities to earn points (e.g., 13 points to make 10). {These opportunities are marked with an * on the syllabus. ** indicates the lab/activity is worth 2 points.} ***Students missing a session – whether for legitimate reasons or not – will not be able to recoup these points***.

Near the end of the course, group members will evaluate the performance of the group (collectively) and its members. Students will earn up to 5 additional individual participation points each based on the perceived quality of their contribution to the group activities and the group project. Students performing "average" relative to their peers will typically earn 2.5-3.0 of these 5 available points, with students perceived as above or below average earning slightly above or below this mark (e.g., earning the full 15 points is rare).

Group participation (15%) [Group]*
Group Participation will consist of two components. Productivity/timeliness during scheduled lab sessions and outside of class time will account for a maximum of 14%. Points are accrued at 2 points per opportunity. There are 7 opportunities to earn points (e.g., 14 points to make 14). Groups are accountable for delivering their product on time, even should an individual member not fulfill his/her responsibilities. Points will be deducted for late or incomplete work. {These opportunities are marked with a + in the syllabus.}

Near the end of the course, group members will evaluate the performance of the group (collectively) and its members. The instructor will review the group assessment of its functioning, in combination with his own assessment. The groups (maximum of 2) deemed by the instructor to have functioned the best (1) and shown the most improvement/overcome a significant adversity (1) will be awarded an additional point.

Group Paper (15%) [Group]*
Near the beginning of the course, each group, in consultation with the course faculty, will select a public health problem to investigate. Time will be allocated for groups to research and prepare a 7-page policy recommendation/ position paper. Completing this project requires the group to work together utilizing the skills and concepts presented during the course. Each group will make a brief presentation of their recommendations to the assembled class. There are specific deadlines for submitting the paper. Copies

will be shared with other students, who will then prepare a written critique. Please observe the deadlines and other expectations for the paper details. Specific details for the preparation, the content, and the format of the paper are presented in the section titled 'Guide to the Group Project.'

The paper will be evaluated using the paper critique/score sheet provided below. As the scale implies, papers demonstrating expected levels of competence for each domain receive a score of 3 (out of a maximum of 5). Thus, the 'expected value' value for an acceptable paper is 60% (3/5). The resulting cumulative score (out of 40) will be adjusted by a factor of 1.6 (capped at a max of 40) and then scaled to 15%.

Presentation (5%) [Group]*
Each group will make a brief (10 minute presentation) of its problem analysis and recommendations to the assembled class as if the targeted decision-maker. The presentation will be followed by a brief (5-10 minute, discretion of the instructor) question & answer session. Specific details for the preparation, the content, and the format of the presentation are presented in the section titled 'Guide to the Group Project.'

The presentation will be evaluated using the presentation critique/score sheet provided below. As the scale implies, presentations demonstrating expected levels of competence for each domain receive a score of 3 (out of a maximum of 5). Thus, the 'expected value' value for an acceptable paper is 60% (3/5). The resulting cumulative score (out of 35) will be adjusted by a factor of 1.5 (capped at a max of 35) and then scaled to 5%.

Critique of paper (10%) [Individual]
Each student will prepare a brief (1 – 1.5 page) written critique of another group's paper. The critique will use the same assessment structure/criteria as applied by the instructor. The student will be graded on the quality and clarity of the critique based on the scoring criteria outlined below. The critique should be a fair and balanced assessment of the strengths and weaknesses of the paper. The student critique will not impact the official grading/scoring of the group's paper (only the instructor's critique counts). Blinded (anonymous) copies of the critiques will be provided to the group being critiqued for feedback/informational purposes.

There will be a tight deadline for retrieving the paper to critique and completing the critique. Please pay careful attention to class announcements and the course MOODLE website.

The critique will be evaluated using the critique score sheet provided below.

**Note: In exceptional cases where a group member's (or members') actions (or lack of actions) was deemed destructive to the group, the member (or members) might receive fewer group activity points than awarded the group as a whole.*

GUIDE TO GROUP PROJECT

1) General

The primary evaluative tool for this course will be a report analyzing a problem selected by each group using the problem-solving framework presented in the course. Each group will prepare and give a brief **oral presentation** (10 minutes) and submit a **7-page paper** (group). Each individual will prepare a brief **written critique** of a paper submitted by another group.

- **DATE: Groups informally discuss proposed problem/topic (during lab session)**
- **DATE: Last day for groups finalize problem/topic. Problem Statement due via email: methomp1@uncc.edu, by TIME**
- **DATE: Brief progress meeting (preliminary table drafts; workplan; clarifications;)**
- **DATE Progress meetings (outline of paper; updated tables; workplan for presentation, 10 minutes)**
- **DATE: Final progress meeting (draft paper, including tables, reviewed, presentation discussed, (20 minutes)**
- **DATE: Papers & presentations due by TIME (electronic format to methomp1@uncc.edu or brought on USB drive for transfer in class).**
- **DATE: Papers available for critique by TIME from the course MOODLE site.**
- **DATE Presentations/Day 1 (4 groups)**
- **DATE – Written Critique due by TIME (electronic format)**
- **DATE Presentations/Day 2 (4 groups)**

2) Objectives:

a) As a group, students select and explicitly define a public health problem within the parameters established by the course faculty.

b) Students will demonstrate understanding of the key concepts presented in class by applying the problem solving framework to their problem, carrying out the analysis from start to finish.

c) Students plan and organize the analysis and presentation of their findings.

d) Students use multidisciplinary group process skills to work as a team and to utilize faculty and other resources available at the school.

e) Students improve their competency in written and verbal communication/ presentation by presenting their report to the class and by submitting a written report and a written critique.

3) Process:

a) Each group, in consultation with course faculty, will select a public health problem of relevance. The faculty will meet with the group during the course to identify and to develop the specific problem area which the group will investigate. The faculty member's areas of interest/expertise may limit the choice of problem area.

b) Course faculty will meet briefly with each group during the scheduled class time as listed above. Groups will be assigned a specific time for the meeting(s) and should be prepared to brief on the status of their work and plan of action.

c) The written report follows the format of a policy briefing and **does not** exceed 7 typewritten double-spaced pages (12 point Times roman font or 10 point Arial font, 1 inch margins) [excluding figures and references]. This group report will be due **no later than the time listed above. Papers received after this time, by even a few minutes, will be penalized.** An electronic copy (USB drive in class or e-mail to methomp1@uncc.edu is required. The file name of the paper should identify the group number and the problem (**e.g., A-Diabetes.doc**). The paper should be a SINGLE file. The title page is unnumbered, the executive summary is either unnumbered or uses a lowercase roman numeral. The first page of the body is numbered in Arabic numerals as page 1.

d) The same afternoon that papers are due (see above), each student retrieves a copy of a paper to critique from the course MOODLE site. The specific paper to critique will be assigned by the course faculty. The critique will be based on the grading rubric provide for papers and graded based on the grading rubric provided for critiques (forms provided in syllabus) and be a maximum of 1.5 double-spaced pages of content, 12 point Times Roman or 10 point Arial font, 1 inch margin page. synopsis. **The individually prepared written critiques will be due no later than the stated time (above).** An electronic copy (e-mail to methomp1@uncc.edu) is required. **Submissions received after this time will be penalized.** The filename should indicate the group/paper being critique and the student submitting the critique (e.g., A-**SmithJoe.doc**). The critique should have a cover page that identifies the student and group being critiqued.

e) On the date(s) outlined above, each group will give a brief (10 minute, maximum of15) presentation of the problem before the assembled class. The setting will be as if testifying before an appropriate governmental committee or corporate board of directors. A brief question and answer/discussion period (5-10 minutes) will follow each presentation.

4) Written Report:

a) The report will be in the form of a position paper being submitted by the group to a specific governmental (health) agency or corporate board of directors. The target audience for the presentation will depend on the problem selected and the solution being recommended.

b) The body of the report will not exceed 7 typed, double-spaced pages, 12 point Times Roman or 10 point Arial font, 1 inch margins. The page count excludes the title page, executive summary, tables, figures, and references). It should be clear, concise, and easy to read.

c) All group members shall participate in the process of researching, preparing, editing, and approving the final document submitted.

d) The report should follow the same basic format as the course paradigm:

Heading {cover sheet}
Who is the intended audience; who is presenting the information? *[Note: This page does not count against the 7 page limit]*

Executive Summary
A one-page (double-spaced) synopsis summarizing the key points. For the synopsis, emphasis should include the major recommended actions as well as the nature and magnitude of the problem with a brief discussion of the rationale. *[Note: This page does not count against the 7 page limit]*

Note: the following description outlines the required content. Groups may choose to alter the organization to best make their case, but are responsible for including this content. {Groups are strongly encouraged to adhere closely to this framework.}

Statement and magnitude of the Problem
Define problem, assumptions, magnitude and distribution, limitations of data, introduce issue, terminology. **State** Goals/Objectives...What is the desired result? What criteria will be used in evaluating 'success'? **Describe** what is known about problem, incidence, prevalence, economic impact, human impact {justify why it is a public health problem and why it is important to solve}

Key Determinants
Describe risk factors & risk behaviors, the natural history of the disease process, other knowledge about the nature of the problem. {A table organizing determinants using a conceptual model is required here. Use the socio-ecological paradigm or host-agent-environment framework here unless an alternative is approved by the course instructor.}

Prevention/Intervention Strategies
Discuss current intervention/prevention strategies being used, additional options for intervention/prevention. {A table using the Haddon matrix or an alternative approved by the instructor is required here.}

Policy & Priority Setting
Describe the relative advantages and disadvantages of the possible intervention/prevention strategies previously outlined, consider potential benefit to individuals and to society, cost to individuals and to society, impact on human rights/ethical dimensions of the problem**,** technical and political feasibility, ease of implementation, and potential obstacles. Presentation should be balanced and cover the range of options (a table(s) linking determinants to options and options to strategies and their relative advantages/disadvantage is helpful in organizing the writing and presentation of these sections). {An evidence table, similar to the one found on pages 72-

73, but adapted to your specified constraints/goals/outcome criteria is required here.}

Specific Recommendations
The concluding paragraph(s) of the paper should be recommended course(s) of action and a rationale for selecting that/those of action(s).

Implementation & Evaluation
For the course of action advocated briefly identify barriers to implementation and means of evaluating the short-term outcomes of your specific intervention(s) on the problem (what evidence would you want to show to prove that your intervention is working as intended?). This section should relate your stated goals with the recommended course of action.

e) List all references cited using endnote format (see *American Journal of Public Health*, available in the library, for examples). *Note: Appropriate use of references adds strength and credibility to arguments. {reference management software recommended}.* ***DO NOT PLAGIARIZE – CITE ALL IDEAS THAT ARE NOT YOUR OWN!! While using sparingly, be sure to quote all phrases/sentences takenverbatim from others... or face the consequences. See the university policies and resources regarding plagiarism and academic integrity.***

f) Evaluation will be based upon clarity of presentation and quality of research/analysis. Critiques prepared by students will be synthesized with critiques prepared by course faculty and teaching assistants. The intent is to provide as much constructive criticism as possible.

g) The references listed below are included to assist you in understanding the objectives of a policy position paper and the role of human rights issues in policy development.

h) A sample paper is available from the course MOODLE site.

5) Oral Presentation:

a) Each group will prepare and give a 10 (max15) minute oral presentation in the form of testimony to a federal hearing or meeting of a corporate board of directors {depending on the nature of the problem and recommended solution selected by the group}.

b) All members of the group will not necessarily be able to participate in the actual presentation but should assist in its preparation, and in the Q&A at the end of the presentation.

c) The content and organization of the presentation should be similar to that of the written report, emphasizing the nature of the problem and the recommended interventions.

d) Use of audio-visuals such as Powerpoint shows or transparencies are

encouraged but NOT required. Audio-visuals need not be elaborate.

e) Evaluation will be based upon clarity of presentation, quality of research/analysis, and ability to handle questions.

6) Critique of Project:

a) Each individual will critique a report prepared by one of the other groups, using the evaluation framework described elsewhere, and participate in the discussion following the presentation.

b) Each student individually will prepare a summary of comments/criticisms of the position paper. The written critique is not to exceed 1.5 typed, double-spaced pages {see grading rubric for the paper}, 12 point Times Roman or 10 point Arial font, 1 inch margins. The comments should be consistent with the scoring rubric. (See also the grading rubric for the critique)

c) This critique is intended to provide constructive criticism that will be shared (anonymously) with the group which prepared the report and will also be evaluated for your grade. Emphasis is on providing detailed constructive criticism to each group.

Available in PDF format from the MOODLE site. (see session 5)

Patton CV & Sawicki DS. The policy analysis process (chapter 2) in *Basic methods of policy analysis and planning, 2nd Edition*. Englewood Cliffs, NJ: Prentice Hall, pp 21-73, 1993.

Gostin L, Mann J. Towards the development of a human rights impact assessment for the formulation and evaluation of public health policies. *Health and Human Rights*, Vol. 1, No.1, pp, 59-80, 1994.

Two handouts prepared by the American Public Health Association for presenters at its annual meeting are included on the course MOODLE site for your reference. One addresses effective powerpoint slides and one provides tips on effective oral presentations:

American Public Health Association. *Powerpoint Presentations*. {guide to presenters at the 134th Annual Meeting} www.apha.org/meetings/powerpoint_presentations.htm (accessed 20 June 2006). **[PDF – MOODLE]**

American Public Health Association. *Tips on how to Give an Oral Presentation*{guide to presenters at the 134th Annual Meeting} www.apha.org/meetings/session_presenter_only.htm#TIPS (accessed 26 June 2006). **[PDF – MOODLE]**

HUMAN RIGHTS IMPACT ASSESSMENT OF HEALTH POLICY

(David Stein, MD, MPH)

Public policy, including health policy should be designed to improve human conditions. Policies often have unintended effects, both negative & positive. Sound policy & ethics dictate that harm is minimized for individuals and populations. Overly broad or restrictive policy could harm by violating human rights. Health professionals have a compelling responsibility to minimize any potential human rights violations. To achieve this goal, Gostin and Mann, described a process to assess potential human rights impacts of policy interventions. (see PDF-MOODLE)

Human rights refer primarily to those referred to in **international** human rights treaties and other international laws, including customary law and humanitarian law, but could also include laws or treaties affecting specific regions of the World or even specific nation-states. In any case assertions of human rights should refer to law that is accepted in some "official" capacity as opposed to a theory or belief. The potential for simultaneous benefit and harm or human rights violations is seen with controls for epidemics of infectious disease and the stigmatization of the traditional association of disease with "deficient hygiene". This is especially true for diseases associated with poverty (e.g. tuberculosis) or with "risk-associated" behavior (e.g. associating AIDS and STDs with promiscuity, homosexuality, or "recreational" drug use).

Policy can be measured for its human rights impact and the least restrictive policy with the lowest human right's "costs" applied. The steps for this process, as outlined by Gostin and Mann follow:

I. Clarify the facts and the public health purpose of the policy to make certain that the proposed intervention is both justified and compelling.
II. Evaluate the likely effectiveness of the policy to address the problem it is designed to alleviate.
III. Determine if the public health policy is narrowly targeted to address the problem in only the population that needs to be affected by the policy but sufficiently impacts that population. Is the proposed intervention appropriately inclusive of targeted individuals and of the problem, without being over or under inclusive?
IV. Examine policy for possible human rights burdens according to international and national human rights instruments, law & procedure.
V. Determine whether the policy is the least restrictive alternative that can achieve the public health objective.
VI. If a coercive public health measure is truly most effective, & least restrictive, ensure that the public health objective is to alleviate a "significant risk" of harm to the public.
VII. Guarantee fair procedures to all persons affected by a policy, especially if a coercive measure is truly essential to avert a significant public risk.

Within the framework of the assigned paper (particularly the analysis of selecting from among alternate interventions), address the human rights implications of the problem and proposed policy intervention.

For this course, specific emphasis should be on derogable versus non-derogable rights and appropriateness of limitations (or enhancements) of individual rights versus benefits to society.

Worksheet#1 Public Health Problem Identification Worksheet [5%] **DUE XXX**

Identify 5 different public health (e.g., community or population-level) problems of which you have some personal knowledge. For each problem listed, identify ways in which the severity/seriousness of the problem is measured [**at a population/community level**]; what efforts/means are currently used to combat this problem [**at a population/community level**]; and suggest efforts which could be used to combat this problem. Use brief phrases/lists to complete the grid. **The topic of tobacco is not permitted.**

Locus/Problem (brief definition)	**Means of Assessing Severity (measurement) [min 2]**	**Current Actions (interventions - current) [min 2]**	**Future Actions [min 2] (interventions - alternatives)**

Worksheet# 2. Problem Solving Outline (Grid) [5%] **DUE XXX**

Identify 3 distinct public health problems of which you have personal knowledge and would consider a potential group project topic. For each problem listed, outline an analysis of the problem using the problem solving paradigm. [*You may reuse problems presented for Assignment #1*] **The topic of tobacco is not permitted.**

	Problem 1	Problem 2	Problem 3
Definition			
Measurement [min 2]			
Determinants/ conceptual framework *(description or model)*			
Strategies (current) [min 2]			
Strategies (potential) [min 2]			
criteria/ rationale for making choice			
Recommendation (choice of strategy[ies] above)			
Method of Evaluation [what changed by your solution			

Group Letter Designation: _____

Individual Level Functioning ("maintenance" functions)

These are member behaviors which promote the building and maintenance of good relationships between team/group members. *[Individual level assessment: Each group member will be assessed on these dimensions.] List up to two group members in each range. This listing is inherently a relative ranking among group members. No one person is expected to excel in all dimensions. Be prepared to provide specific examples/evidence to support your rankings.*

	Relative to other group members		
	Does less often/		*Does more often*
1. Gatekeeping Ensuring that everyone participates, recognizing contributions of others			
	_____	_____	_____
	_____	_____	_____
2. Harmonizing Reconciling conflicts, searching for areas of agreement and common understanding, promoting open discussion of disagreement			
	_____	_____	_____
	_____	_____	_____
3. Standard setting Expressing and raising awareness of group standards, goals, norms, and procedures			
	_____	_____	_____
	_____	_____	_____
4. Active listening Accepting and considering the ideas of others, asking questions, paraphrasing and restating the input of others, paying attention			
	_____	_____	_____
	_____	_____	_____
5. Compromising Admitting error, modifying your position in the interest of group cohesion and progress, searching for common in areas of dispute			
	_____	_____	_____
	_____	_____	_____

Relative to other group members

Does less often/ *Does more often*

6. Energizing

Suggesting breaks, proposing fun and exciting approaches to the task, stimulating and encouraging group members

_____ _____ _____

_____ _____ _____

7. Relieving tension

Easing tense moments through humor, suggesting alternative ways of working

_____ _____ _____

_____ _____ _____

8. Trust building

Accepting and supporting openness of other group members, encouraging risk-taking and individuality

_____ _____ _____

_____ _____ _____

9. Observing emotional climate

Sharing personal feelings, asking how others are feeling

_____ _____ _____

_____ _____ _____

10. Attendance/participation

_____ _____ _____

_____ _____ _____

adapted from: Michael B. Kammerdiener, Consultant, Training & Organization Development

Group Letter Designation: _____

Assessment # 5. Group Level Functioning ("task" functions)

These are member behaviors that are important in helping a team or group to make progress in accomplishing its task. [*Group level evaluation – evaluate your group as a whole; be prepared to provide specific examples/evidence]*

	Rarely do/ do poorly				*Often do/ do well*
1. Initiating	1	2	3	4	5
Getting the action started - proposing initial goals, suggesting a way to work together, clarifying the group's task					
2. Information seeking	1	2	3	4	5
Asking for facts, ideas, opinions, feelings from other group members					
3. Information giving	1	2	3	4	5
Offering facts, ideas, opinions, feelings of your own					
4. Clarifying	1	2	3	4	5
Asking questions about confusing points, restating comments to ensure understanding					
5. Analyzing	1	2	3	4	5
Suggesting various perspectives, defining the problems and issues, offering potential solutions					
6. Summarizing	1	2	3	4	5
Pulling together related ideas and suggestions, listing major points of discussion and agreement					
7. Reality testing	1	2	3	4	5
Examining the practicality of proposed solutions evaluating alternatives					
8. Testing consensus	1	2	3	4	5
Asking if group is nearing a decision, sending up a "trial balloon"					
9. Coordinating	1	2	3	4	5
Identifying roles and responsibilities, suggesting timeliness					
10. Evaluating	1	2	3	4	5
Comparing group decisions and accomplishments with group standards and goals					

Total: _____/50

adapted from: Michael B. Kammerdiener, Consultant, Training & Organization Development

Name: _____

Instructions:
Complete the table below for each member of your group, including yourself.
You have points totaling three (3) times the size of your group to allocate (i.e., if your group totals 5 members you have 3*5 = 15 points to allocate).

- Allocate these points based on each person's relative contribution to the group work throughout the course, emphasizing contribution to the group project.
- Points can only be awarded in ½ point increments (e.g., 0, 0.5, 1.0,1.5 ... 3n)
- This is a zero-sum exercise.
    - If everyone contributed equally, each person would receive a score of three (3).
    - If you give someone more than three points for contributing above average, one or more members must receive fewer than 3 points to offset this.
    - You can assign an individual a score of zero if you feel s/he contributed nothing to your group or a score of 3*n if you feel s/he did all of the work.
    - Scores more than ½ point above or below "3, equal" require a brief, objective supporting justification.

Group:	
Group Member	Points awarded (3 = 'equal share')
Total Effort	

1. For each group member who you rated as having **lower** than equal contribution (e.g., 2.5 or lower), please state why:

2. For each group member who you rated as having a **higher** than equal contribution (e.g. 3.5 or higher), please state why:

Group Letter Designation_____

Introduction to Public Health
Assessment # 6. Paper Grading Rubric

For each of the 8 criteria, please assign a whole number score of 0, 1, 2, 3, 4, or 5.

A score of 0 indicates that the criterion was not addressed.
A score of 3 indicates that the criterion was appropriately met.
A score of 5 indicates that the criterion was met at an exceptional level.

Note: The written evaluation should be consistent with these ratings.

1. Statement of Problem _____

Was the problem clearly identified and defined?
Is it an appropriate/relevant public health problem?
Is the group/organization/agency selected to hear the argument appropriate?

2. Magnitude of the problem _____

Is the magnitude of the problem clearly identified?
Are the strengths and limitations of the measures/estimates discussed?
Does the paper make a compelling case that the problem is significant enough to warrant attention?

3. Key Determinants _____

Are the appropriate biological, behavioral, and environmental determinants of the problem addressed?
Is an organizing table (S-E model ,etc) used and integrated into the text

4. Prevention/Intervention Strategies _____

Are current efforts summarized?
Are a sufficient breadth of options/strategies considered?
Do the options follow from the key determinants discussed?
Is an organizing table (Haddon matrix, etc) used and integrated into the text

5. Policy & Priority Setting _____

Are the relative advantages and disadvantages of each option/strategy considered?
Are the benefits/risks compared at individual, community, and societal levels?
Are political, economic, and technical feasibility considered?
Is an evidence table used and integrated into the text

6. Recommendations _____

Are the recommendations consistent with the analysis of the problem?

7. Implementation, Practice & Evaluation _____

Are the likely barriers to implementation addressed?
Is the impact of the proposed intervention measurable?
Is 'success' defined?

8. Overall Impression _____

Is a compelling argument made that would convince you to adopt the recommended strategy?
Is the argument presented succinctly and effectively (logical development, coherence)?
Are components such as executive summary, references in place?

TOTAL {The total may range from 0 to 40} _____

Group Letter Designation_____

Introduction to Public Health
Assessment #7. Presentation Grading Rubric

For each of the 7 criteria, please assign a whole number score of 0, 1, 2, 3, 4, or 5.
A score of 0 indicates that the criterion was not addressed.
A score of 3 indicates that the criterion was appropriately met.
A score of 5 indicates that the criterion was met at an exceptional level.

1. Content _____
- Was the target audience identified?
- Was the problem clearly identified and defined?
- Were the determinants explained?
- Were alternate strategies addressed?
- Was a course of action recommended?
- Was the recommended course of action supported?

2. Organization _____
- Was the content organized and presented in a coherent manner?
- Were new or unfamiliar terms explained?
- Did the presentation flow smoothly?

3. Style _____
- Did the speaker(s) hold your interest?
- Was/were the speaker(s) convincing/effective?
- Was/were the speaker(s)' voices loud enough? understandable?
- Did the speaker(s) make eye contact with the audience?

4. Audio-visuals _____
- Were transparencies/slides used effectively? {not cluttered, readable}
- Was an appropriate number of visual aids used?
- Were visuals clearly explained?
- Did the visuals add to the presentation?

5. Time Utilization _____
- Was the time appropriately allocated to the parts of the presentation?
- Were the time constraints followed?
- Did it appear that the presentation had been rehearsed?

6. Questioning _____
- Were questions appropriately addressed?
- Did the speaker(s) interact with the audience?

7. Overall Impression _____
- Was a compelling argument made?
- Was the presentation convincing?

TOTAL {The total may range from 0 to 35} _____

{write specific comments/suggestions on back of page}

Introduction to Public Health
Assessment # 8. Critique of Another Group's Paper Grading Rubric

Our emphasis is on providing detailed, constructive criticism, focusing on the quality of the argument (critical/analytic thinking) and use of the data to support a recommendation. Critiques will be scored using the following framework.

Content {the most important} --- 7.5pts max

Is the problem summarized? - ½ pt
Is the argument presented in the paper outlined/summarized?-1.5 pts
Are the strengths and weaknesses of the argument discussed with detail?-3pts
Are suggestions made for improving the paper?-2pts
Are alternate interpretations/assessments of the data offered?- ½ pt

Organization --- 1.5 pts

Is the critique organized and presented effectively/Does the presentation flow logically -1pt
Is the page limit observed? - ½ pt {± ½ page}

Style ----1pt

Is the critique well-written? – ½ pt
Are complete sentences/ proper punctuation and grammar used – ½ pt

HLTH 8201 Introduction to Quantitative Research Design
Fall 20XX
Time: XXXX
Location: XXX

This syllabus contains the policies and expectations I have established for HLTH8201 (cross-listed with HSRD8101 Design of Health Services Research). Please read the entire syllabus carefully before continuing in this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Unless you are prepared to abide by these policies and expectations, you risk losing the opportunity to participate further in the course.

I will conduct this class in an atmosphere of mutual respect. I encourage your active participation in class discussions. Each of us may have strongly differing opinions on the various topics of class discussions. The conflict of ideas is encouraged and welcomed. The orderly questioning of the ideas of others, including mine, is similarly welcomed. However, I will exercise my responsibility to manage the discussions so that ideas and argument can proceed in an orderly fashion. You should expect that if your conduct during class discussions seriously disrupts the atmosphere of mutual respect I expect in this class, you will not be permitted to participate further.

The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class and/or at the MOODLE site for this course, where this syllabus and other pertinent course information, assignments, and resources will be posted.

Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations.

HLTH 8201 Introduction to Quantitative Research Design (3 credits, doctoral)
HSRD8101 Design of Health Services Research (3 credits, doctoral)
Pre/Co-requisites: none
Time: XXXX
Location: XXXX

Instructor contact information; office hours, etc

Course Description (Catalog)

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.

Course competencies:

This course contributes to the following Public Health Sciences PhD competencies:

- Distinguish conceptual or analytic issues from empirical issues
- Identify knowledge gaps of public health significance
- Formulate clear research questions
- Formulate a testable hypothesis or hypotheses
- Specify causal processes
- Compare different ways of knowing
- Identify critical elements of a research problem
- Ground research questions in practice, reflective of the needs of and priorities of the community, as well as theory
- Identify threats to validity in quantitative and qualitative designs
- Align researchable problems with appropriate methods of inquiry
- Identify useful sources of data
- Identify novel approaches to address research questions
- Explain the advantages and disadvantages of different sampling strategies
- Identify independent and dependent variables when appropriate
- Articulate the strengths and weaknesses of various methods of inquiry, including those selected for use in an investigation
- Develop standardized research protocols for primary data collection in the field using quantitative, qualitative, and mixed methods
- Select statistical tests based on data structure and statistical assumptions
- Use appropriate analytical methods to clarify associations between variables and to delineate causal inferences

And the following Health Services Research PhD competencies

- Discuss the specific philosophies of multiple approaches to qualitative inquiry, such as ethnography, phenomenology, and grounded theory.
- Explore issues in qualitative research design such as sampling and recording visual, auditory, or text data.
- Demonstrate a capability to collect, manage, and conduct basic analysis of qualitative data.
- Compare advantages of semi-structured interviews, unstructured interviews, focus groups, content analysis for use in thematic analysis.
- Critique the rigor of qualitative research designs in published studies.
- Compare and contrast categories and levels of quantitative health services research.
- Identify and use principles for constructing an appropriate quantitative research design.

- Examine and critically analyze the theoretical and methodological bases of quantitative health services research.
- Demonstrate utilization of criteria for choosing quantitative measurement tools and sampling techniques in health services research.
- Demonstrate appropriate procedures to conduct power analysis.
- Analyze the sensitivity of quantitative designs in health services research.
- Demonstrate strengths and limitations of quantitative and qualitative health services research designs for obtaining knowledge about health disparities affecting diverse populations.

Instructional Objectives

By the end of this course, the student will:

1. Develop a preliminary statement of research focus/interest
2. Understand and apply the research process in public health and health services research, including writing testable research questions and/or measurable evaluation objectives, understanding and applying ethical standards in the conduct of research, and appropriate selection of methodologies to effectively address the research question, including consideration of issues specific to diverse cultures and populations.
3. Describe, compare and contrast, choose, and critically apply major approaches in designing public health and health services research studies, addressing both theoretical and practical considerations.
4. Compare and contrast key strengths and limitations of various sampling methodologies to select an appropriate methodology for the research question at hand; be able to prepare and apply a sampling protocol.
5. Plan for the collection, management, and analysis of quantitative data, understanding advantages and disadvantages of alternate approaches.
6. Plan for the analysis, reporting, and dissemination of research findings.
7. Critique published public health and health services literature.
8. Prepare a quantitative design research protocol for a given theme.
9. Deliver an effective oral presentation summarizing/defending a research proposal.

Required Texts

Shi, L. (2008). *Health services research methods, 2nd Ed*. Thomson Delmar Learning. ISBN: 978-1-4283-5229-2

Maxwell, JA. (2005). Q*ualitative research design: An interactive approach, 2nd Ed*. London: Sage Publishers. ISBN: 0-7619-2607-0

Grades

The course is comprised of the following graded elements.

	Assignment	Due date
0%	IRB training (P/F only)	
5%	Campus Town Sampling Assignment	
5%	Researcher Identity Memo	
25%	Mid-term exam	
10%	Quantitative article critique	

10%	Qualitative article critique
15%	HSRE research proposal
5%	Research proposal presentation
25%	Final exam

Final grades will be based on the standard decile grading scale. TOTAL POSSIBLE: 100 points.

≥90	A
≥80, <90	B
≥70, <80	C
<70	U

University Policies

Code of Student Responsibility:

"The *UNC Charlotte Code of Student Responsibility* (the Code) sets forth certain rights and responsibilities in matters of student discipline. The Code defines these responsibilities and guarantees you certain rights that ensure your protection from unjust imposition of disciplinary penalties. You should familiarize yourself with the provisions and procedures of the Code" (Introductory statement from the UNC Charlotte brochure about the Code of Student Responsibility). The entire document may be found at this Internet address: **http://legal.uncc.edu/policies/ps-104.html**

Academic Integrity:

Students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity. This code forbids cheating, fabrications, or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student's work is free from academic dishonesty of any type; and grades in this course therefore should be and will adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction in the course grade. In almost all cases the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office or http://legal.uncc.edu/policies/ps-105.html. Students are expected to report cases of academic dishonesty to the course's instructor.

Note specific to this course: This course involves elements of individual and group assignments. Those assignments where group effort is expected/required are marked as such. (Remember: all members of a group are accountable for assignments submitted by the group.) In some cases, students are asked to discuss collectively, but to summarize in writing individually. In all other cases, students are expected to work independently.

Violations of academic ethics will be strictly enforced and severely punished, with penalties ranging from deductions of points, to a zero for an assignment, to a failing grade for the course (or something more severe if the incident is taken to the Academic Integrity Board).

Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the

semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

All students are required to abide by the UNC Charlotte Sexual Harassment Policy (http://www.legal.uncc.edu/policies/ps-61.html) and the policy on Responsible Use of University Computing and Electronic Communication Resources (http://www.legal.uncc.edu/policies/ps-66.html). Sexual harassment, as defined in the UNC Charlotte Sexual Harassment Policy, is prohibited, even when carried out through computers or other electronic communications systems, including course-based chat rooms or message boards.

Religious Accommodation:
It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester http://legal.uncc.edu/policies/ps-134.html. The census date for each semester (typically the tenth day of instruction) can be found in UNC Charlotte's Academic Calendar (http://registrar.uncc.edu/calendars/calendar.htm).

Course Policies
Cells phones and other technology: The use of cell phones, beepers, or other communication devices is disruptive, and is therefore prohibited during class. Note: During exam situations, use of such devices may be construed as cheating and appropriate measures taken as an academic ethics violation.

Communication. E-mails are generally answered within 24 hours when received during the hours of Monday – Friday, 9am to 4pm. Messages outside these hours will be responded to as soon as is practical.

Attendance Policy: As noted above, class preparation, participation, and attendance are expected. In instances of group activities and assignments, your group members (and their grades) depend upon the full participation of all members. Attendance and preparation will be assessed within the framework outlined above and may include several unannounced brief written exercises ("pop quizzes") and in class exercises throughout the semester. If you will be unable to attend class, you are expected to inform the instructor and the members of your group as soon as is practical. Many assignments are experiential and are not easily 'made up.'

Late policy: Other than the in-class examinations, all assignments are to be submitted electronically via email to methomp1@uncc.edu (not via moodle). This procedure provides a date/time stamp. If you do not receive a confirmatory email by the deadline, then I have not received your assignment and it will be considered late. Barring an acceptable explanation and unless otherwise specified for a given assignment, late assignments incur the following penalties: within the first 12 hours after the due date, a 10% deduction will be taken; within 12-48 hours, a 20% deduction is taken; and after 48 hours assignments are not accepted. Exceptions will be made for extreme circumstances, but it behooves you to notify me as soon as possible, preferably before the due date. {Remember, it is OK to submit BEFORE the deadline}

Lecture Sequence

Session	Topic(s)	Readings/Assignments
1	Course introduction Intro to the research process Research questions/Testable hypotheses	Shi – preface, Ch 1-3 Maxwell, Ch. 1, and pp. 67-78
2	Difference between research and evaluation Philosophical basis of qualitative research Choosing qualitative vs quantitative methods	Shi – Ch 9; Maxwell Ch. 2, 3, 5
3	Introduction to quantitative research Experimental and quasi-experimental designs Threats to reliability and validity	Shi Ch 6,7,10
4	Experimental and quasi-experimental designs Threats to reliability and validity (*Continued)*	Additional Readings (see below) *Researcher identity memo (5%) due-3:30p*
5	Human subjects *Visit https://www.citiprogram.org/ and complete student modules*	Shi – Ch 11 Additional Readings (see below)
6	Recruitment and sampling strategies Probability and non-probability sampling Statistical and practical significance	*Proof of CITI IRB training due* Shi Ch 8,12,13 Additional Readings (see below)
7	Midterm Exam *(25%)* *Quantitative critique paper distributed after exam*	
8	Campus Town sampling exercise	Additional Readings (see below) *Quantitative Critique due (10%)*
9	Instrumentation/measurement; Level of data and implications for its collection and analysis; Sampling exercise debriefing	*[draft sampling write up due]* Shi Ch 14 Additional Readings (see below)
10	HSR/E proposal writing Case study – proposal to evaluate AED in EMS; Case study – the Green Path Campaign	*Sampling writing up (5%) due* Additional Readings (see below)
11	Overview of Qualitative Research: data generation; rigor; theory & interpretation *Qualitative critique article distributed*	Maxwell Ch. 6 Additional Readings (see below)
12	Writing up research	Shi Ch 15, Appendix 1 Additional Readings (see below)

		Qualitative article critique (10%) due-3:30p
13	Presentations	*Papers due; presentation order announced*
14	Presentations conclude; course evaluation	
15	Final Exam (25%)	**Time TBA**

Additional readings:

Session 5

Callahan, D. & Jennings, B. (2002). Ethics and Public Health: Forging a strong relationship. *American Journal of Public Health*, 92(2), 169-176.

Quinn, S. C. (2003). Protecting human subjects: The role of community advisory boards. *American Journal of Public Health*, 94(6), 918-922.

Also – news article regarding Peter Pronovost

Session 6

Burnham G, Lafta R, Doocy S, Roberts L (2006). Mortality after the 2003 invasion of Iraq: a cross-sectional: cluster sample survey. The *Lancet* 368: 1421-28.

Keiger D (2007). The number. *Johns Hopkins Magazine*, 59(1): 30-37.

Morse, J. M. (2000). Determining sample size. *Qualitative Health Research*, 10(1), 3-5.

Patton, M. Q. (1990). Designing qualitative studies. In M. Q. Patton (Ed.), *Qualitative evaluation and research methods* (Second ed., pp. 169-186). London: SAGE Publications.

Background (optional): Bartlett, J. E., Kotrlik, J. W., & Higgins C. C. (2001). Organizational research: Determining appropriate sample size in survey research. I*nformation Technology, Learning, and Performance Journa*l; 19(1): 43-50.

Background (optional): Burnham, et al. The human cost of the war in Iraq: A mortality study, 2002-2006. (report, 25 pages)

Session 9

Choi, B. C. K., & Pak, A. W. P. (2005). A catalog of biases in questionnaires. *Preventing Chronic Disease, 2*(1). www.cdc.gov/pcd/issues/2005/jan/04_0050.htm

Scientific Advisory Committee, Medical Outcomes Trust. Instrument review criteria. *Medical Outcomes Trust Bulletin*, September 1995:I-IV.

Ware, J. E. Jr., & Sherbourne, C. D. (1992). The MOS 36-Item Short-From Health Survey (SF-36): I. Conceptual Framework and Item Selection. *Medical Care*, 30(6):473-483.

McHorney, C. A., Ware, J. E. Jr., & Raczek, A. E. (1993). The MOS 36-Item Short -From Health Survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. *Medical Care*, 31(3):247-263.

Mallinson, S. (2002). Listening to respondents: A qualitative assessment of the Short Form 36 Health Status Questionnaire. *Social Science & Medicine, 54*, 11-21.

Background (optional): SF36 instrument

Session 10

Thompson, M. E., & Harutyunyan, T. L. (2006). Contraceptive Practice in Armenia: Panel Evaluation of an Information-Education-Communication Campaign. *Social Science & Medicine, 63*, 2770-2783.

Thompson, M. E., & Harutyunyan, T. L. (*under review*). Ideation: An Empirical Assessment from an Information-Education-Communication Campaign in Armenia.

Sample proposal – A proposal to evaluate the effectiveness of training Emergency Medical Technicians to use automatic defibrillators in the Maryland prehospital setting.

Session 11

Morse, J. M. (2004). Qualitative comparison: Appropriateness, equivalence, and fit. *Qualitative Health Research, 14*(10), 1323-1325.

Mays, N., & Pope, C. (1995). Qualitative research: Rigor and qualitative research. *BMJ, 311*, 109-112.

Davies, D, & Dodd, J. (2002) Qualitative research and the question of rigor. *Qualitative Health Research* 12(2): 279-289.

Morse, J. (2004). Constructing qualitatively derived theory: Concept construction and concept typologies. *Qualitative Health Research, 14*(10), 1387-1395.

Wright, M. C. (2007). Making sense of data: How public health graduate students build theory through qualitative research techniques. *Qualitative Health Research, 17*(1), 94-101.

Session 12

Gilgun, J. F. (2005). "Grab" and good science: Writing up the results of qualitative research. *Qualitative Health Research, 15*(2), 256-262.

SPECIFICATION OF GRADED ASSIGNMENTS

Examinations (25% each)

The in-class mid-term and final examinations (25% each) shall address core knowledge and applications of knowledge and principles within practical settings. The examinations will involve a mix of question formats (e.g., short answer, multiple choice, and brief or extended essays). The stated course and lecture objectives will guide your study and preparation for these examinations.

NOTE the special class time for the designated final exam period.

Researcher identity memo (RIM) (5%)

For this assignment you will write a researcher identity memo as described in Maxwell, p. 27. In Exercise 2.1, Maxwell asks you to relate your goals, values, assumptions, and experiences to your planned research. If you have a (preliminary) research topic, then please follow those guidelines. You may not be focused enough to do that yet. So, here are several questions to stimulate your thinking and your writing. This is your memo. The intent is for you to reflect on why you are here and what is driving you – essentially to perhaps uncover some biases or perspectives. For Public Health Sciences PhD students, you will continue to develop and refine this memo as you progress through the program (e.g. in HLTH8221 & HLTH8222).
The following questions are food for thought:

1. What has led you to pursue a doctoral degree in behavioral sciences or health services research? Was there some specific event that influenced you? A series of events? What are they?
2. What are your experiences with the health care system?
3. How has your own health or the health of your family influenced your assumptions about health services research? Or about the role of health behaviors in influencing health?
4. What are your assumptions about people? About health? People and health care utilization? Whether people listen to their doctor?
5. What expectations do you have about what a doctoral program would be like?
6. What are your expectations about your performance in this doctoral program?
7. What are your expectations of what a doctoral degree will do for you? Work-wise, family-wise.
8. What is the value of education within your family or culture?

- The RIM should be 7-10 pages in length (double-spaced), 1 inch margins all around; using Arial 11 or Times Roman 12 font. You do not need to cite references.
- The Assignment is due by DEADLINE. The RIM will be submitted electronically to the instructor via email to methomp1@uncc.edu (do not submit via moodle).
- The document shall have the student's name on the cover page. A hard copy will be printed, graded, and returned to the student.
- The filename should include the student's name as in the example: ThompsonME_RIM.doc). .The standard late penalties will apply.
- Remember - Early submission is okay. ☺

Human Subjects – CITI Training
(0%; MUST complete to pass course)

Visit https://www.citiprogram.org/ and complete the student modules. ***Provide proof of completion by deadline***

Campus Town Sampling Exercise (5%)

This assignment is a group effort and worth 5% of your final course grade. Each member of the group will receive the same score. The assignment is due by deadline

Case Scenario. While working on a program evaluation design for the Campus Town Health Plan, you realize that a survey might be needed to address some of your missing data needs. You realize that due to resource and time constraints a sample (rather than a census) would be needed, but also are aware that your project officer at the State Health Department (an accountant by training) has not had a course in biostatistics and is skeptical of "statistical mumbo-jumbo," believing only in hard numbers, not estimates.

You devise an example data set to demonstrate – in a simple and practical way – to your project officer the expected precision/strengths and weaknesses of various sampling strategies. You take data from another health survey listing 200 people, by age (in years), age in broad categories,

and their associated depression score and call this your "population." You organize the data by age in a refined or sorted list. You also leave the data organized sequentially/geographically so that geographic "neighbors" are next to each other in the data set (raw or unsorted).

The population mean (as this is a population this is μ and not $\bar{x}$) is reported for the dataset and for each age group. A clear association between increasing age and increasing depression scores is observed.

Exercise. In a group of size N (the instructor will specify based on final course enrollment), work with the attached "population" data to demonstrate the precision of the estimate of the population mean obtained using various sampling approaches. You may use either a table of random numbers, a calculator with a random number generator, or a PC software package function (such as RANDBETWEEN in Excel).

NOTE – an Excel spreadsheet with these data (one worksheet tab unsorted and one tab sorted) is available from the moodle site.

Draw a sample of 20 respondents (a 10% sample) from the population using each of the following methods:

1. Simple Random Sampling
2. Systematic Random Sampling
3. Stratified Random Sampling by age category
4. Cluster sampling (clusters of 4 contiguous), where the cluster start points are determined by simple random sampling{be sure to use the "raw" or unsorted data file}
5. Cluster sampling (clusters of 5 contiguous observations), start points determined by systematic {again, use "raw" data file}

In a written report (one report from the group, MS Word format) [**draft report due deadline1; final report for grading *due deadline2***

- Describe how you implemented each sampling method
    - Specify which datafile you used for methods 1-3, and explain why
    - Explicitly state any assumptions about the data and decisions you made prior to commencing the sampling.
    - Explicitly summarize any 'unexpected' or unforeseen occurrences and any decisions you were forced to make after commencing the sampling
    - Report the observed mean for each sampling method.
- Based on both practical considerations (consider resources, logistics, prior data) and you comfort with the rigor/precision of the sampling method (the "accuracy" of the results), describe what you feel are the strengths and weaknesses of each method as applied to this data set.
- Based on your analysis, recommend (and defend) the strategy you would recommend for surveying Campus Town.
- Include documentations of your methods (e.g. the ID# of the observations drawn for each sample and a summary table depicting your sample means for age and depression by sampling method (e.g., something similar to the summary table presented in the unsorted data file but replacing your method comparison with the age category comparison)

Written Critiques (10% each)

Following classroom discussion on the structure and purpose of critiques and after appropriate methodological content has been delivered, students will demonstrate their application of those methods by critiquing published health services research articles (one qualitative and one quantitative). While the purpose of the critique is the same in both cases, the structure, style, and areas of emphasis of the critiques do differ.

Common Elements. Critique Format/Style. The document will have 1" margins on all sides, Times Roman 12 point font (or Arial 11 point), and be double-spaced. References are to consistently follow either the AMA or APA styles. Please put the complete article reference at the top of your paper. Both written critiques will be a maximum of 4 written pages (± ½ page) {excluding cover page}.

The critique will be submitted electronically to the instructor via email to methomp1@uncc.edu (do not submit via moodle). The document shall have the student's name on the cover page. The filename should include the student's name as in the example: ThompsonME_quant_critique.doc).

Evaluation Guidelines. My emphasis is on providing detailed, constructive criticism, focusing on the quality of the argument (critical/analytic thinking) and use of the design/methods to answer the question and analysis (or planned analysis) of the data to support the conclusions and policy recommendations.

The critique is scored out of a maximum of 30 points (see form) and will be scaled to the percentage value for the assignment (10%). The maximum point value for each element is noted and will be scored to the nearest ½ point. Scoring rubrics follow the content summaries

Quantitiative Article Critiques

Outline. The logical development of a critique will address the substantive questions below, usually in this or another logically defensible order of presentation. The headings are to be interpreted as guiding questions around which to develop paragraph or multi-paragraph responses as part of the critique. The critique itself should flow as an integrated document and not be a disconnected series of responses to implicit questions (topic paragraphs, transitions, concluding sentences, etc.) using the outline below.

QUESTION: What is the research question under investigation? Was it clearly stated?

HYPOTHESIS: What is the hypothesis?

REVIEW OF LITERATURE: Was there adequate justification for the study? Convincing case the study would fill a research gap? Were there a logical organization, critical analysis, and synthesis of related literature?

THEORETICAL FRAMEWORK: Was it introduced promptly and explained clearly? What were the assumptions—logic behind the relationships expected in the paper?

SAMPLE: Target population described—method of selection—was inclusion and exclusion criteria reported—nonparticipation and attrition rates?—adequate sample size? Random assignment to groups

HUMAN SUBJECT CONCERNS: Evidence of informed consent? Freedom from harm and coercion, protection of privacy? IRB review/approval?

METHODOLOGY: *Operational Definitions*: Provided for all variables measured or manipulated—evidence of adequate reliability and validity of measures? *Independent & Dependent Variables*—what were they? What methods were used to test it? What control conditions, if any, were included? *Procedures*: Method of data collection clearly described; threats to internal and external validity identified and controlled? Did it allow for a good test of the theory/hypothesis? Were there any built-in biases?

ANALYSIS: Did the author use appropriate statistical/analytical techniques? Were they congruent with the research questions, hypotheses, and level of data?

FINDINGS: What were the main findings, and how did the author interpret them? Did they relate back to the hypotheses/research questions? Did the author present an overly optimistic view of the findings? Did the results show practical significance?

CONCLUSIONS: What general conclusions did the author(s) draw? Were the strengths and limitations of the study identified? Were implications identified? Did the author caution about any practice implications without replicating the study? Included recommendations?

SIGNIFICANCE OF CONTRIBUTION: How would you describe your overall reactions to the paper (important, useful, insightful, ground breaking, well crafted but trivial, or what?)

LOGICAL CONSISTENCY: Were there obvious relationships among the theoretical framework, review of literature, purpose, research questions, design, definitions, analysis, and interpretation of findings.

OVERALL ASSESMENT: Synthesis of critique, overall assessment/main points

Qualitative Article Critiques

The purpose of this assignment is to review and critique the article from the perspective of a journal reviewer. So, you are an expert in qualitative research methods and are reviewing this article for ***Aging and Health Research***. You should review/critique the article in a ***professional and constructive manner*** so that the authors can improve their manuscript. [Review unto others as you would have them review unto you!]

***Evaluation Guidelines*.** The emphasis is on providing detailed, constructive criticism, focusing on the quality of the argument (critical/analytic thinking) and use of the design/methods to answer the question and analysis (or planned analysis) of the data to support the conclusions and policy recommendations.

The critique is scored out of a maximum of 30 points (see form) and will be scaled to the percentage value of each of the assignments (10%). The maximum point value for each element is noted and will be scored to the nearest ½ point.

QUANTITATIVE CRITIQUE SCORING RUBRIC
{items scored to nearest 0.5 point}

Content {the most important} --- 22pts max

_____ Is the hypothesis/objective outlined/summarized ?-1pt

_____ Are each of the relevant content domains summarized/addressed? -9 pts

_____ Is appropriate weight given to the key domains of methods, setting, and analysis? - 3pts

_____ Are the strengths and weaknesses of the design/methods/analysis discussed and critiqued?-6pts

_____ Are alternate interpretations/designs/assessments of the data offered?-2pts

_____ Are suggestions made for improving the paper ?-1pt

Organization --- 4 pts max

_____ Is the critique organized and presented effectively? -2pts

_____ Does the presentation flow logically? -1pt

_____ Is the page limit observed? -1pt {± ½ page}

Style ----4pts max

_____ Is the critique well-written and effectively presented? - 1pt

_____ Are complete sentences used {not outline format}? - 1pt

_____ Are proper punctuation and grammar used? - 1pt

_____ Are references appropriately and consistently cited? - 1pt

_____ TOTAL (RAW)

_____ TOTAL (Scaled) to 10 max

QUALITATIVE CRITIQUE SCORING RUBRIC [items scored to nearest 0.5 point**]**

Content: make sure to address these specific questions in your review! --- 20pts max

_____ Is the research question clearly stated?-1pt

_____ What is the study design?-2pts

_____ How is theory used in this study? -3 pts

_____ How well do the authors describe the sampling strategy? - 3pts

_____ What are the elements of rigor in the study? Is this sufficient?-8pts

_____ What are the limitations and their consequences?-2pts

_____ Are suggestions made for future research ?-1pt

Organization --- 4 pts max

_____ Is the critique organized and presented effectively? -2pts

_____ Does the presentation flow logically? -1pt

_____ Is the page limit observed? -1pt {± ½ page}

Style ----4pts max

_____ Is the critique well-written and effectively presented? - 1pt

_____ Are complete sentences used {not outline format}? - 1pt

_____ Are proper punctuation and grammar used? - 1pt

_____ Are references appropriately and consistently cited? - 1pt

Final decision – 2 pts, indicate your decision about the manuscript

_____ Accept the manuscript, with minor revisions

_____ Revise and resubmit the manuscript, subject to revisions as noted by reviewers

_____ Reject the manuscript

_____ TOTAL (RAW)

_____ TOTAL (Scaled) to 10 max

Quantitative Proposal (15%)

Like the critiques, the quantitative and qualitative proposals are similar in many respects, but are organized slightly differently. For this course you will prepare a quantitative health services research (HSR) or health services evaluation (HSE) proposal. This proposal format mirrors the one students use for the dissertation defense (but on an abridged scale). The proposal should explore a quantitative research question, ideally exploring or focusing a topic and/or design/method related to the student's likely dissertation.

***Format/Structure*.** The final proposal will be a maximum of 7 pages in length, excluding the cover page, executive summary, reference page(s), and appendices. The document will have 1" margins on all sides, Times Roman 12 point font, or Arial 11 point font (10cpi), and be double-spaced. The executive summary is a maximum of 1 page (also double spaced). References are to consistently follow either the AMA or APA styles.

One electronic copy is required to be submitted via e-mail to methomp1@uncc.edu by the stated deadline (do not submit via moodle).

- The document shall have the student's name on the cover page.
- The electronic file shall include the student's name as in the example: ThompsonME_QuantProposal.doc.

Quantitative Research Proposal

Students will prepare and submit a health service research or evaluation proposal which utilizes a quantitative method. The proposal will start with a research question/hypothesis and outline all elements of a standard proposal, using the structure outlined below.

The final proposal shall have the following organizational structure. Sections highlighted in bold will carry double weight in the scoring of the proposal:

- Title page [with student's name, unnumbered]
- Executive Summary: summarizes main ideas, captures reader's interest [unnumbered – can be single space; maximum of 1 page if double spaced, /½ page if single]
- Introduction/specific aims: problem defined; goals stated; relevance of project [numbered as page 1]
- Literature review: quality/thoroughness of literature review (*what is/what is not known*); demonstrates where this project fits in (*new methods; new approach*)
- Research questions/hypotheses: measurable objective or testable hypothesis; provide conceptual framework for inter-relationship of variables
- Methods: design identified; appropriate to answer question (*Campbell/Stanley*); consideration given to options; rationale given for choosing design; strengths and limitations inherent in design discussed (*validity*); measurements; constructs; definition and tools (*reliability*)
- Setting
    - population identified appropriate to answer the research question;
    - provide inclusion/exclusion criteria;
    - provide sampling frames, techniques for assignment (randomization);

    - considerations/advantages/disadvantages of choice
- Sources of data
    - describe data, data forms from which variables are derived;
    - type of data (primary, secondary);
    - collection/cleaning procedures;
    - attach relevant documents as appendices (questionnaires, consent forms, etc.)
- Analysis Plan
    - statistical techniques identified; appropriate to answer the question;
    - methods described; limitations noted (assessment of reliability);
    - plan sufficient to address research question;
    - confounding/interaction/bias/design limitations accounted for;
    - issues of power/sample size addressed; calculations shown
- Logistical considerations (personnel, time lines, budgets)
- Ethical considerations
- Overall assessment/summary. Is the study design appropriate to the stated objectives? appropriate level of data used? appropriate literature review been included? does project increase understanding or replicate inconclusive/controversial findings?
- References (if applicable)
- Appendices, etc (if applicable)

The quantitative proposal is due to methomp1@uncc.edu by deadline

Evaluation Guidelines. The outline/criteria described above are reflected on the score sheet (next page) that will be used to assess the proposal. Scores for each element can range from 0 to 3 in 0.5 unit increments. Composite scores can range from a low of zero (0) to a maximum of 45. Scores of 2-3 are expected/acceptable values for each single-weight element. The overall score will be inflated by a factor of 1.3 and then proportionately scaled to the percentage value given this assignment (15%).

Presentation of the Research Proposals (5%)

Students will present and defend their research proposal to the class as if the class were a review panel considering funding the proposal. Students will have 15 minutes for their formal/prepared presentation. Approximately 10 minutes will be allocated for questioning from the audience, moderated by the course faculty.

This exercise will provide practical public speaking experience to a professional/collegial audience, improve skills in responding to unscripted questions, and prepare students for their proposal defense.

The emphasis of this exercise is not on the content per se (that is graded as part of the written assignment) but on the selection and presentation of content to sell the audience on the proposal.

Presentation skills will be scored using the rubric two pages below

Health Services Research or Program Evaluation Proposal: **Evaluation Score Sheet**

Student Name:_____ Date:

Scoring: 3 = exceptional; 2 = fully met; 1 = partially met; 0 = not met/missing
{***bolded underlined*** *items carry double weight; scored to nearest 0.5*}

1. Executive Summary _____(3)

2. Introduction/specific aims: _____(3)

3. Literature review: _____(3)

4. Research questions/hypotheses: _____(3)

5. Methods: _____ (6)

6. Setting: _____ (6)

7. Sources of data: _____(3)

8. Analysis: _____(6)

9. Logistical considerations: _____(3)

10. Ethical considerations: _____(3)

11. **Overall assessment:** **_____(6)**

TOTAL (min 0; max 45) **_____**

Adjusted by 1.3 and scaled score to 15% _____

PRESENTATION CRITIQUE RUBRIC

For each of the 7 criteria, a whole number score of 0, 1, 2, 3, 4, or 5 will be assigned.

A score of 0 indicates that the criterion was not addressed.

A score of 3 indicates that the criterion was appropriately met for a doctoral graduate.

A score of 5 indicates that the criterion was met at an exceptional level for a doctoral graduate.

1. Content _____

Was the target audience identified?
Was the problem clearly identified and defined?
Were the determinants explained?
Were alternate strategies addressed?
Was a course of action recommended?
Was the recommended course of action supported?

2. Organization _____

Was the content organized and presented in a coherent manner?
Were new or unfamiliar terms explained?
Did the presentation flow smoothly?

3. Style _____

Did the speaker(s) hold your interest?
Was/were the speaker(s) convincing/effective?
Was/were the speaker(s)' voices loud enough? understandable?
Did the speaker(s) make eye contact with the audience?

4. Audio-visuals _____

Were transparencies/slides used effectively? {not cluttered, readable}
Was an appropriate number of visual aids used?
Were visuals clearly explained?
Did the visuals add to the presentation?

5. Time Utilization _____

Was the time appropriately allocated to the parts of the presentation?
Were the time constraints followed?
Did it appear that the presentation had been rehearsed?

6. Questioning _____

Were questions appropriately addressed?
Did the speaker(s) interact with the audience?

7. Overall Impression _____

Was a compelling argument made?
Was the presentation convincing?

TOTAL {The total may range from 0 to 35} _____

Scaled Score _____ (out of 5)

University of North Carolina at Charlotte
College of Health and Human Services

Course Number: HLTH8220

Course Title: Theories and Interventions in Behavioral Sciences

Course Credit and Clock Hours: 3 Graduate

Pre-requisites and/or Co requisites: None

Instructor: TBD

Catalog Description: 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.

Course Objectives: The course is designed to meet the PhD competencies as outlined in Student Handbook.

- Apply major and emerging theories of health behavior within the context of a social ecological framework
- Describe how culture and health behaviors influence health disparities
- Discuss the outcomes of major preventive interventions
- Understand different theoretical perspectives and what each illuminates and obscures
- Explain problems in the field using theory
- Identify knowledge gaps of public health significance
- Identify the inadequacies in existing measurement instruments and procedures that need to be challenged
- Write precisely and plainly for technical and general audiences

Diversity Objective: Critically examine prominent theories and their utility with vulnerable populations.

Teaching Strategies: This course utilizes a seminar format where students present the assigned material and lead the class in discussion. Students will individually select a public health issue of their choice and design a theory-based intervention to address the issue. The intervention will be described in the format of an NIH R01 grant proposal.

Required Texts:
Gerin, W., Kapelewski, C., Itinger, J., and Spruill, T. (2010). Writing the NIH Grant Proposal: A Step-by-Step Guide (2nd edition). Sage Publications.

Goodson, P. (2010). Theory in Health Promotion Research and Practice: Thinking Outside the Box. Jones and Bartlett Publishers.

Evaluation Methods:

Lead topic/article discussion	10%
Midterm Exam (ind)	20%
Grant proposal	50%
Mock grant review	10%
Class participation	10%

Lead topic/article discussion – each student will be responsible for leading the class in discussion of one of the assigned articles and/or the topic for the week (depending upon the number of students in the class). Students must prepare 5 discussion questions and facilitate the class in discussion of the article, how it relates to the other material assigned for the week and previous material presented. [10%]

Midterm Exam – students will take an exam based upon the theories reviewed and the use of theory in public health behavioral sciences research. The exam format will consist of short answer and essay questions. [20%]

NIH R01 grant proposal – students will choose an NIH RFA/PAR for an R01 grant mechanism to respond to. Students will develop an intervention based on theory and draft a complete R01 grant proposal. Students will be required to turn in various components of the proposal during the semester for feedback and to ensure that adequate progress is being made. [50%]

Mock grant review – students will be divided into 2 or more NIH study section panels to participate in reviewing and scoring sample grants. [10%]

Class participation – each student is expected to have thoroughly read the assigned material and to participate in the class discussion on the material; both answering and posing questions. [10%]

Grading Scale: 90-100 A, 80-89 B, 70-79 C, Below 70 U

Course Outline

WEEK	TOPIC	ASSIGNMENTS	DUE DATES
1	Course introduction – Advancing the field using theory	(Alley, Putney, Rice, & Bengtson, 2010); Goodson text, ch. 1-3	
2	Individual level theories	(Carpenter, 2010; Elinder, Bergstrom, Hagberg, Wihlman, & Hagstromer, 2010; Fuller, Stewart Williams, & Byles, 2010; Lubans, et al., 2010; Turner-McGrievy, et al., 2009)	
3	Social theories	(Berkman & Glass, 2000; Christakis & Fowler, 2007; Kreuter, et al., 2010; Perry & Pescosolido, 2010)	Choose a proposal topic; write a 1 paragraph rationale for your focus
4	Cultural theories	(Castro, Barrera Jr., & Steiker, 2010; Olvera, et al., 2010; Resnicow, Davis, & al., 2009)	
5	Coping theories	(Heckman, et al., 2010; Kiser, Donohue, Hodgkinson, Medoff, & Black, 2010; Wadsworth, et al., 2010)	Submit intervention proposal topic
6	Exam		
7	Deconstructing an RFA/PA	Gerin text, chapters 1-4; Read PA-06-180 and submitted grant; Also PAR-08-212 and PAR-10-136	Students should find a suitable RFA/PA that they can respond to
8	R01 overview and hidden sections	Gerin text, chapters 5 & 6	
9	Reading intervention research	(Davies, Walker, & Grimshaw, 2010; Glanz & Bishop, 2010); Goodson text ch. 8	
10	Innovative but low risk	What constitutes innovative?	Draft of background & significance
11	Sampling and recruitment	Who are the participants and how will you get them?	
12	Designing the intervention	What will they do, for how long, and how will you know it worked? Goodson text ch. 9	
13	Collaboration & preliminary studies	Assembling the team; painting them in the best possible light; How to reduce new investigator risk.	Draft of the research plan including measures

14	Additional considerations: budget, IRB, multi-site, timeline, challenges	Gerin text, ch. 7-8	
15	Mock grant reviews	Gerin text, ch. 9-10	Final draft of completed grant

University Policies:

Code of Student Responsibility:
"The *UNC Charlotte Code of Student Responsibility* (the Code) sets forth certain rights and responsibilities in matters of student discipline. The Code defines these responsibilities and guarantees you certain rights that ensure your protection from unjust imposition of disciplinary penalties. You should familiarize yourself with the provisions and procedures of the Code" (Introductory statement from the UNC Charlotte brochure about the Code of Student Responsibility). The entire document may be found at this Internet address:
http://legal.uncc.edu/policies/ps-104.html

Academic Integrity:
Students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity. This code forbids cheating, fabrications, or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student's work is free from academic dishonesty of any type; and grades in this course therefore should be and will adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction in the course grade. In almost all cases the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office or http://legal.uncc.edu/policies/ps-105.html. Students are expected to report cases of academic dishonesty to the course's instructor.

Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

All students are required to abide by the UNC Charlotte Sexual Harassment Policy (http://www.legal.uncc.edu/policies/ps-61.html) and the policy on Responsible Use

of University Computing and Electronic Communication Resources (http://www.legal.uncc.edu/policies/ps-66.html). Sexual harassment, as defined in the UNC Charlotte Sexual Harassment Policy, is prohibited, even when carried out through computers or other electronic communications systems, including course-based chat rooms or message boards.

Religious Accommodation:
It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester http://legal.uncc.edu/policies/ps-134.html. The census date for each semester (typically the tenth day of instruction) can be found in UNC Charlotte's Academic Calendar (http://registrar.uncc.edu/calendars/calendar.htm).

Changes to the Syllabus: The instructor reserves the right to alter this syllabus as needed. These changes will be communicated in class and via uncc email.

Additional assigned readings available on moodle

Alley, D. E., Putney, N. M., Rice, M., & Bengtson, V. L. (2010). The Increasing Use of Theory in Social Gerontology: 1990–2004. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 65B*(5), 583-590.

Berkman, L. F., & Glass, T. (2000). Social integration, social networks, social support and health. In L. F. Berkman & I. Kawachi (Eds.), *Social epidemiology* (pp. 137-173). Oxford: Oxford University Press.

Carpenter, C. J. (2010). A meta-analysis of the effectiveness of health belief model variables in predicting behavior. *Health Communication, 25*(8), 661-669.

Castro, F. G., Barrera Jr., M., & Steiker, L. K. H. (2010). Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology, 6*, 213-239.

Christakis, N. A., & Fowler, J. H. (2007). The spread of obesity in a large social network over 32 years. *The New England Journal of Medicine, 357*(4), 370-379.

Davies, P., Walker, A., & Grimshaw, J. (2010). A systematic review of the use of theory in the design of guideline dissemination and implementation strategies and interpretation of the results of rigorous evaluations. *Implementation Science, 5*(1), 14.

Elinder, L., Bergstrom, H., Hagberg, J., Wihlman, U., & Hagstromer, M. (2010). Promoting a healthy diet and physical activity in adults with intellectual disabilities living in community residences: Design and evaluation of a cluster-randomized intervention. *BMC Public Health, 10*(1), 761.

Fuller, B. G., Stewart Williams, J. A., & Byles, J. E. (2010). Active living—the perception of older people with chronic conditions. *Chronic Illness, 6*(4), 294-305.

Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. *Annual Review of Public Health, 31*, 399-418.

Heckman, T., Sikkema, K., Hansen, N., Kochman, A., Heh, V., & Neufeld, S. (2010). A randomized clinical trial of a coping improvement group intervention for HIV-infected older adults. *Journal of Behavioral Medicine*, 1-10.

Kiser, L. J., Donohue, A., Hodgkinson, S., Medoff, D., & Black, M. M. (2010). Strengthening family coping resources: The feasibility of a multifamily group intervention for families exposed to trauma. *Journal of Traumatic Stress, 23*(6), 802-806.

Kreuter, M. W., Holmes, K., Alcaraz, K., Kalesan, B., Rath, S., Richert, M., et al. (2010). Comparing narrative and informational videos to increase mammography in low-income African American women. [doi: DOI: 10.1016/j.pec.2010.09.008]. *Patient Education and Counseling, 81*(Supplement 1), S6-S14.

Lubans, D., Morgan, P., Dewar, D., Collins, C., Plotnikoff, R., Okely, A., et al. (2010). The Nutrition and Enjoyable Activity for Teen Girls (NEAT girls) randomized controlled trial for adolescent girls from disadvantaged secondary schools: rationale, study protocol, and baseline results. *BMC Public Health, 10*(1), 652.

Olvera, N., Bush, J. A., Sharma, S. V., Knox, B. B., Scherer, R. L., & Butte, N. F. (2010). BOUNCE: A Community-based Mother-daughter Healthy Lifestyle Intervention for Low-income Latino Families. *Obesity, 18*(n1s), S102-S104.

Perry, B. L., & Pescosolido, B. A. (2010). Functional specificity in discussion networks: The influence of general and problem-specific networks on health outcomes. [doi: DOI: 10.1016/j.socnet.2010.06.005]. *Social Networks, 32*(4), 345-357.

Resnicow, K., Davis, R., & al., e. (2009). Tailoring a fruit and vegetable intervention on ethnic identity: Results of a randomized trial. *Health Psychology, 28*(4), 394-403.

Turner-McGrievy, G. M., Campbell, M. K., Tate, D. F., Truesdale, K. P., Bowling, J. M., & Crosby, L. (2009). Pounds Off Digitally Study: A Randomized Podcasting Weight-Loss Intervention. [doi: DOI: 10.1016/j.amepre.2009.06.010]. *American Journal of Preventive Medicine, 37*(4), 263-269.

Wadsworth, M., Santiago, C., Einhorn, L., Etter, E., Rienks, S., & Markman, H. (2010). Preliminary Efficacy of an Intervention to Reduce Psychosocial Stress and Improve Coping in Low-Income Families. *American Journal of Community Psychology*, 1-15.

University of North Carolina at Charlotte
College of Health and Human Services

Course Number: HLTH8221 Theory Generation in Behavioral Sciences

Course Title: Theory Generation in Behavioral Sciences

Course Credit and Clock Hours: 3 Graduate

Pre-requisites and/or Co requisites: None

Instructor: TBD

Catalog Description: 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.

Course Objectives: The course is designed to meet the PhD competencies as outlined in the Student Handbook. The primary course objectives are as follows:

- Describe underlying paradigms of qualitative research and its relationship to theory
- Discuss practical and theoretical issues and limitations related to qualitative research and research designs
- Apply knowledge of qualitative research to conduct a research project with a public health community partner
- Discuss how to work with vulnerable or diverse populations using concepts of rapport, emic/etic perspective, techniques to establish rigor, and reducing power differentials

Course competencies:

- Distinguish conceptual or analytic issues from empirical issues
- Compare different ways of knowing
- Compare across research methods and allied philosophical traditions
- Formulate clear research questions
- Identify critical elements of a research problem
- Build trusting relationships with people and groups in the community who work on a health problem and have been affected by it
- Understand how the profession and its research is viewed in the community

- Connect one's research to the work of practitioners and community members in the field
- Collaborate with other disciplines in the community
- Build upon strengths and resources in the community
- Ground research questions in practice, reflective of the needs of and priorities of the community, as well as theory
- Engage communities as partners in the research process
- Identify threats to validity in quantitative and qualitative designs
- Align researchable problems with appropriate methods of inquiry
- Identify useful sources of data
- Identify novel approaches to address research questions
- Explain the advantages and disadvantages of different sampling strategies
- Identify independent and dependent variables when appropriate
- Articulate the strengths and weaknesses of various methods of inquiry, including those selected for use in an investigation
- Develop standardized research protocols for primary data collection in the field using quantitative, qualitative, and mixed methods
- Work in collaborative multi disciplinary teams

Teaching Strategies: This course utilizes lecture, textbooks, research articles, and application through field work to immerse students in qualitative methods. There is considerable individual (ind) and group work (grp) outside of class and during class hours. Successful students will be punctual, prepared and will participate in all activities both in and out of class. The field work assignments are structured to give students practical and professional experience working with public health community organizations on "live" research projects. Ideally these research projects will lead to a qualitative research publication or conference presentation for students in this course sequence (HLTH8221-8222).

Evaluation Methods:

RIM assignment (ind)	10%
Reflexive journal (ind)	10%
Midterm Exam (ind)	20%
Interview or Focus Group Guide (grp)	10%
Qualitative Community Project Protocol (grp)	15%
Transcript (grp)	5%
Observation field notes (ind)	10%
Final exam (ind)	20%

RIM (Researcher Identity Memo) – following instructions in Maxwell, students will write a researcher identity memo where they explore why they are pursuing a doctorate, why they are interested in particular research topics, and what experiences they have had that influence them in their thinking about this topic. Students will submit the RIM twice – once at the beginning of the course and then again at the end of the course [10%].

Reflexive journal – Students are required to keep a reflexive journal and make weekly (at a minimum) entries about their impressions and experiences as they learn about and conduct qualitative research. The students will hand in their journals on 4 occasions. This assignment will carry over into HLTH8222. [10%]

Midterm Exam – students will complete an in-class, short answer exam worth 20%. The exam will cover basic concepts related to qualitative research, its use and application to developing theory, and designing qualitative studies.

Interview or focus group guide – As a group, students will develop an interview or focus group guide consistent with their community partner's project requirements [10%].

Community partner project research protocol – Based on discussions with your community partner, students will develop a qualitative research protocol that documents the purpose, approach, and logistics of how their qualitative research project will be conducted. Students must provide a detailed write up of how the project will be conducted and identify which team members will perform individual tasks. This protocol will be submitted along with the IRB protocol so that the data can ultimately be published [15%]

Observation field notes – Students will complete a field observation for 60 minutes and record and submit detailed field notes [10%].

Transcript – students must submit a written transcript of their focus group or interview(s) by the end of the semester [5%].

Final exam – this will be an in-class, written exam to assess how the student integrates the semester's learning. The format will be short answer and essay [20%].

Required Texts: Marshall, C. and Rossman, G.B. (2010). Designing Qualitative Research, 5th ed. Sage Publications.
Stake, Robert E. (2010). Qualitative Research: Studying How Things Work. Guilford Press.
Maxwell, Joseph A. (2005). Qualitative Research Design: An Interactive Approach. Sage Publications.

Not required but useful: Jaccard, J. & Jacoby, J. (2010). Theory construction and model-building skills. Guilford Press.

College Policy:

Grades: 90-100 A, 80-89 B, 70-79 C, Below 70 U

Keep in mind that as your professor, I do not "give" you grades. ***You earn your grade.***

Topical/Unit Outline:

HLTH8221

Course Outline

WEEK	TOPIC	ASSIGNMENTS	JOURNAL ENTRIES	TOPICS
1	Course introduction – qualitative research and theory	Read Ch. 1 in Stake; chapters 1 & 2 in Maxwell;		
2	Philosophy of qualitative research & qualitative research designs	Read ch. 2 in Marshall & Rossman;	What are your biases toward qualitative research?	Underlying paradigms, bias/perspective, types of research designs, strengths and weaknesses
3	Reading qualitative research & Writing the research question	Ch. 4 Marshall & Rossman; also Bogan et al, 2007; Coggin et al, 2006; Gonzalez et al., 2007; Horgan et al., 2010; Husain et al, 2007; Linden et al, 2007; Lopez et al, 2005;	What is a research question that interests you that can't be answered with numbers? Turn in RIM	
4	Components of qualitative research designs	Patton, 1990; Morse, 2000; Marshall & Rossman Ch. 5		Data, purposeful & theoretical sampling, recruitment, rigor
5	Generating data	Read chapters 2 & 3 in Stake; Guillemin, 2004; Chapter 6 in Marshall & Rossman; Finlay, 2002	What types of data speak to you? Turn in journal 1	FGs, interviews, Delphi, content analysis, photovoice, drawings, observation, reflexive journal
6	Rigor	Chapter from Lincoln & Guba; Mays & Pope, 1995		Trustworthiness, authenticity, triangulation
7	Mid-term exam			
8	Writing an interview or focus group guide	Spradley – Ethnographic interviewing	Turn in journal 2	Types of ethnographic questions
9	Logistics: Conducting research in the field	Marshall & Rossman, pp. 112-131	Turn in IG/FG draft	Rapport, safety, self-disclosure, presentation,

				recording, ethics
10	Observation & field notes	Briggs et al, 2003; Paterson et al, 2003; Review pp. 139-142 in Marshall & Rossman	Turn in community partner project research protocol	Observer roles; how to take field notes; how to pay attention; what will you get
11	Field work		Turn in journal 3	
12	Field work		Turn in field note assignment	
13	Field work		What are reactions to conducting field work? What are you good at? What questions do you wish you had asked?	
14	Research proposal development	Ch. 10 Marshall & Rossman	Turn in revised RIM	
15	Final exam		Turn in transcript; turn in journal 4	

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Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
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Additional assigned readings available on moodle

Bogan, L. K., Powell, J. M., & Dudgeon, B. J. (2007). Experiences of living with non-cancer-related lymphedema: Implications for clinical practice. *Qualitative Health Research, 17*(2), 213-224.

Briggs, K., Askham, J., Norman, I., & Redfern, S. (2003). Accomplishing care at home for people with dementia: Using observational methodology. *Qualitative Health Research, 13*(2), 268-280.

Coggin, C., & Shaw-Perry, M. (2006). Breast cancer survivorship: Expressed needs of Black women. *Journal of Psychosocial Oncology, 24*(4), 107-122.

Finlay, L. (2002). "Outing" the researcher: The provenance, process, and practice of reflexivity. *Qualitative Health Research, 12*(4), 531-545.

Gonzalez, L. O., & Lengacher, C. A. (2007). Coping with breast cancer: A qualitative analysis of reflective journals. *Issues in Mental Health Nursing, 28*, 489-510.

Guillemin, M. (2004). Understanding illness: Using drawings as a research method. *Qualitative Health Research, 14*(2), 272-289.

Horgan, O., Holcombe, C., & Salmon, P. (2010). Experiencing positive change after a diagnosis of breast cancer: A grounded theory analysis. *Psycho-Oncology, epub-DOI: 10.1002/pon.1825*

Husain, L. S., Collins, K., Reed, M., & Wyld, L. (2007). Choices in cancer treatment: A qualitative study of the older women's (> 70 years) perspective. *Psycho-Oncology*, from www.interscience.wiley.com

Linden, H. M., Reisch, L. M., Hart Jr., A., Harrington, M. A., Nakano, C., Jackson, J. C., et al. (2007). Attitudes toward participation in breast cancer randomized clinical trials in the African American community: A focus group study. *Cancer Nursing, 30*(4), 261-269.

Lopez, E.D.S., Eng, E., Randall-David, E., & Robinson, N. (2005). Quality-of-life concerns of African American breast cancer survivors within rural North Carolina: Blending the techniques of photovoice and grounded theory. *Qualitative Health Research*, 15(1), 99-115.

Mays, N., & Pope, C. (1995). Qualitative research: Rigor and qualitative research. *BMJ, 311,* 109-112.

Morse, J. M. (2000). Determining sample size. *Qualitative Health Research, 10*(1), 3-5.

Paterson, B. L., Bottorff, J. L., & Hewat, R. (2003). Blending observational methods: Possibilities, strategies, and challenges. *International Journal of Qualitative Methods*, *2*(1), 29-38.

Patton, M. Q. (1990). Designing qualitative studies. In M. Q. Patton (Ed.), *Qualitative evaluation and research methods* (Second ed., pp. 169-186). London: SAGE Publications.

Spradley, J. P. (1979). *The Ethnographic Interview* (pp. 83-91). Harcourt Brace Jovanovich.

University of North Carolina at Charlotte
College of Health and Human Services

Course Number: HLTH8222

Course Title: Theory Generation and Analysis in Behavioral Sciences

Course Credit and Clock Hours: 3 Graduate

Pre-requisites and/or Co requisites: HLTH 8221

Instructor: TBD, Office, Office hrs, contact info

Catalog Description:
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.

Course Objectives: The course is designed to meet the PhD competencies as outlined in the Student Handbook. The primary course objectives are as follows:

- Describe various styles and approaches of qualitative data management and analysis
- Articulate (and apply) the relative appropriateness of different analysis approaches for a particular qualitative study or method.
- Understand the stages and strategies involved in managing, analyzing, preparing and submitting a qualitative or mixed methods paper for publication.
- Think theoretically and critically
- Discuss how to work with vulnerable or diverse populations using concepts of rapport, emic/etic perspective, techniques to establish rigor, and reducing power differentials

Course competencies

- Build trusting relationships with people and groups in the community who work on a health problem and have been affected by it
- Understand how the profession and its research is viewed in the community
- Connect one's research to the work of practitioners and community members in the field
- Collaborate with other disciplines in the community
- Ground research questions in practice, reflective of the needs of and priorities of the community, as well as theory
- Engage communities as partners in the research process
- Identify threats to validity in quantitative and qualitative designs
- Articulate the strengths and weaknesses of various methods of inquiry, including those selected for use in an investigation
- Understand methods of analyzing both quantitative and qualitative data

- Interpret quantitative and qualitative data
- Work in collaborative multi disciplinary teams

College Policy:

Grades: 90-100 A, 80-89 B, 70-79 C, Below 70 U

Keep in mind that as your professor, I do not "give" you grades. ***You earn your grade.***

Teaching Strategies: This course utilizes lecture, textbooks, research articles, and application through field work to immerse students in qualitative methods. There is considerable individual and group work outside of class and during class hours. Successful students will be punctual, prepared and will participate in all activities both in and out of class. The field work assignments are structured to give students practical and professional experience working with public health community organizations on "live" research projects. Ideally these research projects will lead to a qualitative research publication or conference presentation for students in this course sequence (HLTH8221-8222).

Evaluation Methods:

Reflexive journal (ind)	10%
Memo Assignment	10%
Midterm Exam (ind)	20%
Codebook Assignment (ind)	10%
Qualitative Report (grp)	15%
Presentation (grp)	10%
Final exam (ind)	20%
In-class Activities/Participation	5%

Reflexive journal – Students are required to keep a reflexive journal and make weekly (at a minimum) entries about their impressions and experiences as they learn about and conduct qualitative research. The students will hand in their journals on 4 occasions. This assignment will carry over into HLTH8222. [10%]

Midterm exam— students will complete an in-class, short answer exam worth 20%. The exam will cover basic concepts related to qualitative research, its use and application to developing theory, and designing qualitative studies. [20%]

Code book (group)—Students will produce a draft codebook with at least 25 codes, their explanations, and usage. The primary purpose of this assignment is to confirm that you are thinking of codes correctly, so this draft can certainly change in the future. However, the more complete a codebook you turn in, the more useful our feedback will be to you. [10%]

Draft methods/results section—The purpose of this assignment is to get you thinking about your final paper and confirm that you are on the right track. You will receive feedback on this assignment no later than one week before the final paper is due. Make sure that this draft results

section conforms to the writing style requirements of your chosen journal. **Include a tentative paper title and your primary aims or research questions for the paper.** The results section should be 5-8 pp double-spaced text. You may wish to prepare a table or figure as part of your assignment. Keep in mind that this is just one section of your journal article, so make sure to leave plenty of room for the introduction, methods, etc. that will be added later. Brevity will also help us get return comments to you quickly. [10%]

Final Paper–The paper will be an analysis of individual or group data collected during HLTH 8221. Your paper's format will depend on where you would like to publish your paper. We will provide formats from several journals that commonly publish qualitative public health research. If you would like to write for a different journal, please clear your choice with the instructor before you begin. Attach appendices to your paper. These should include instrument(s) you used to collect the data (e.g. in-depth interview guide) and your Atlas.ti code book. [15%]

Final research presentation—This is a group assignment. Research groups are expected to give a 30-minute presentation of their projects in the final week of the class. [10%]

Class attendance and class participation—Students are expected to attend class, to read all assigned material prior to class, and to actively participate in class discussions and in the group research projects. [5%]

Required Texts:

Corbin, J. & Strauss, A. (2008). Basics of Qualitative Research: Techniques and procedures for developing grounded theory, 3rd ed. Thousand Oaks, CA: Sage Publications.
Marshall, C. and Rossman, G.B. (2010). Designing Qualitative Research, 5th ed. Thousand Oaks, CA: Sage Publications.
Stake, Robert E. (2010). Qualitative Research: Studying How Things Work. Guilford Press.
Maxwell, Joseph A. (2005). Qualitative Research Design: An Interactive Approach. Sage Publications.

Additional assigned readings available on moodle

Emerson, R.M., Fretz, R.I., and Shaw, L.L. (1995). Writing ethnographic fieldnotes (Chapter 6: Processing fieldnotes: Coding and memoing, pp. 142-168). Chicago: University of Chicago Press.
Frieze, I. H. (2000). Publishing qualitative research in *Sex Roles* [editorial]. *Sex roles, 58,* 1-2.
McCormack, C. (2000). From interpretive transcript to interpretive story: Part 1 – Viewing the transcript through multiple lenses. *Field Methods, 12*, 282-297.
McCormack, C. (2000). From interview transcript to interpretive story: Part 2 – Developing an interpretive story. *Field Methods, 12*, 298-315.
Miles, M.B. and Huberman, A.M. (1994). Qualitative data analysis, 2nd Edition (Chapter 4: Early steps in data analysis: Memoing, pp. 72-76). Thousand Oaks, CA: Sage Publications.
Perlesz, A. and Lindsay, J. (2003). Methodological triangulation in researching families: Making sense of dissonant data. *International Journal of Social Research Methodology, 6*, 25-40.
Weitzman E.A. (2000). Software and qualitative research. In: N. Denzin & Y. Lincoln (Eds.), Handbook of qualitative research, 2nd Edition. Thousand Oaks, CA: Sage Publications, pp. 803-820.

Topical/Unit Outline
Overview of Class Sessions and Assignments

Class	Topic	Assignments	Readings	Topics
#1	Course overview Review of qualitative methods Overview of qualitative analysis		Marshall & Rossman, Ch 8	Course mechanics Additional background on cognitive interviewing methods, structured pile sorts, rating and rankings
#2	Overview of qualitative analysis Participatory research methods		Corbin & Strauss, Ch 4 Stake, Ch 9	Participatory group approaches, background and use of methods such as social mapping, body mapping
#3	Management of qualitative data (Atlas ti)	Journal 1	Stake, Ch 7	Field notes and transcripts Translation Software programs for the management and analysis of qualitative data. *Atlas.ti* demonstration
#4	Qualitative data analysis: Ethnography, narrative, & case study approaches		Emerson et al., Ch 6	Overview of approaches to analyze qualitative data. Ethnography, case studies, narrative research. Coding and analysis approaches, credibility, representation of self
#5	Qualitative data analysis: Phenomenology & grounded theory	Journal 2	Corbin & Strauss, Ch 8-9	Phenomenology and grounded theory. Coding and analysis approaches, credibility, representation of self
#6	Coding and identifying emerging themes		Corbin & Strauss, Ch 8-9 Stake, Ch 8	Main emphasis, questions asked, sampling, coding approaches, credibility, representation of self Process of coding, memos, types of codes.

Class	Topic	Assignments	Readings	Topics
				Particularly in grounded theory methodology (but also in other types of qualitative analysis) analytic memos are seen as an intermediate step between data collection and a 'final' written product.
#7	More coding Memos	Codebook Assignment	Marshall & Rossman, Ch 8 McCormack, Part 1	Coding reliability Problems with overcoding Group work: Developing a common coding plan
#8	**MIDTERM EXAM**			
#9	Matrices and other visual displays of data Group work: Deciding forms of data presentation	Journal 3	McCormack, Part 2	Review different forms of data presentation When & how to use quotes Forms of data presentation associated with specific analysis styles Journals: qualitative research
#10	Testing findings Triangulation	Memo Assignment	Stake, Ch 7 Perlesz, & Lindsay, 2003	We will review & discuss methods qualitative and ethnographic researchers have used to shore up claims or demonstrate the robustness of their findings, including triangulation and member validation. The utility of these methods and the ways in which they are imagined to operate continue to be the subjects of considerable debate.

Class	Topic	Assignments	Readings	Topics
#11	Writing up and presenting qualitative data Group work: Comparison of two qualitative articles		Marshall & Rossman, Ch 10	Structure & components of a journal article, authorship, journal selection, impact factors. Posters vs papers vs book chapters vs books
#12	Writing proposals for studies involving qualitative research	Journal 4	Maxwell, Ch 7	*The "hook"* Focus on aims, preliminary studies and analysis sections using the NIH model Critiques of proposals
#13	Publishing qualitative research	Qualitative Report	Frieze, 2008	Process of publishing, journal selection, responding to reviewer comments Review critiques of papers
#14	Presentations			
#15	**FINAL EXAM**			

University Policies

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University of North Carolina at Charlotte
College of Health and Human Services

Course Number: HLTH8223 Social Determinants of Health

Course Title: Social Determinants of Health

Course Credit and Clock Hours: 3 Graduate

Pre-requisites and/or Co requisites: None

Instructor: TBD

Catalog Description: 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.

Course Objectives: The course is designed to meet the PhD competencies as outlined in Student Handbook.

- Describe how culture and health behaviors influence health disparities
- Describe the research on risk and protective factors associated with the major sources of human morbidity and mortality
- Discuss major controversies in public health policy
- Read broadly, in other fields, seeking connections that are not at first obvious
- Produce a synthesis of the research literature on a topic
- Compare different ways of knowing
- Demonstrate expert knowledge of the research literature on a topic
- Identify knowledge gaps of public health significance
- Write precisely and plainly for technical and general audiences

Diversity Objective: Discuss how social determinants create and perpetuate health disparities among vulnerable populations.

Required Texts:
Social Determinants of Health (2005). Marmot & Wilkinson, Oxford University Press.

Additional Readings – see Bibliography on p. 5

Topical/Unit Outline:

Course Outline

WEEK	TOPIC	ASSIGNMENTS	DUE DATES
1	Course introduction – social organization and health	Read Ch. 1 & 2 in text	
2	Early life & the lifecourse	Read ch. 3 & 4 in text; (Geronimus, Hicken, Keene, & Bound, 2006; Jasienska, 2009; Victora, et al., 2008)	
3	Health and work	Ch. 5 & 6 in text; (Bambra & Popham, 2010; Gould & Hertel-Fernandez, 2010)	Topic statement due
4	Physical/built environment and health	Read ch. 7; (Boyle, Buchman, Barnes, James, & Bennett, 2010; Eugene, David, & Mary, 2010; Fish, Ettner, Ang, & Brown, 2010)	
5	Families and social support	Read chapters 8	2 page topic importance due
6	Food	Chapter 9; (Entwistle, Kendall, & Mead, 2010; Mello, et al., 2010)	
7	Mid-term exam		
8	Poverty	Ch. 10; (Dinour, Bergen, & Yeh, 2007; Fiscella & Kitzman, 2009; Kalichman & Grebler, 2010)	Methods section and bibliography due
9	Health behaviors	Ch. 11	
10	Race and ethnicity	Ch. 12; (Adimora & Schoenbach, 2005; Burgess, Powell, Griffin, & Partin, 2009; Keyes, 2009; Kuzawa & Sweet, 2009)	
11	Aging and health	Ch. 13; (Bielak, 2010; Boult, et al., 2009; Carlos, 2011; Lang, Michel, & Zekry, 2009)	Synthesis table due
12	Neighborhoods and housing	Ch. 14; (Levitt, Culhane, DeGenova, O'Quinn, & Bainbridge, 2009; O'Toole, et al., 2010)	
13	Sexual behaviors and	Ch. 15; (Fredriksen-	

	health	Goldsen, Kim, Barkan, Balsam, & Mincer, 2010; Mustanski, Garofalo, & Emerson, 2010; Schnarrs, et al., 2010)	
14	Social vulnerability and inequality	Ch. 16;	Final paper due
15	Final exam		

College Policy:

Grades: 90-100 A, 80-89 B, 70-79 C, Below 70 U

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Teaching Strategies: This course utilizes a seminar format where students present the assigned material and lead the class in discussion. Students will individually select a social determinant related to their health topic of choice to write a paper suitable for publication, or the literature review section of their dissertation. Students will learn how to conduct a literature search and review and synthesize published research literature.

Evaluation Methods:

Lead topic/article discussion	10%
Midterm Exam (ind)	20%
Final exam (ind)	20%
Literature Review paper	40%
Class participation	10%

Lead topic/article discussion – Each student will be responsible for leading the class in discussion of one of the assigned articles and/or the topic for the week (depending upon the number of students in the class). Students must prepare 5 discussion questions and facilitate the class in discussion of the article, how it relates to the other material assigned for the week and previous material presented. [10%]

Midterm Exam – Students will complete an in-class, written essay exam[20%].

Final exam – This exam will be in-class, written essay exam [20%].

Literature Review paper – Students will choose a social determinant that they perceive affects a health behavior, and relate it to a specific health outcome (e.g. how family social support influences chronic disease self-care and hypertension management). Each student will conduct a systematic literature review using multiple article databases. The topic chosen should be related to the student's dissertation interests. Students will be required

to turn in various components of the paper during the semester for feedback and to ensure that adequate progress is being made. [40%]

Class participation – Each student is expected to have thoroughly read the assigned material and to participate in the class discussion on the material; both answering and posing questions. [10%]

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Bibliography – These assigned readings are available on moodle

Adimora, A. A., & Schoenbach, V. J. (2005). Social Context, Sexual Networks, and Racial Disparities in Rates of Sexually Transmitted Infections. *Journal of Infectious Diseases, 191*(Supplement 1), S115-S122.

Bambra, C., & Popham, F. (2010). Worklessness and regional differences in the social gradient in general health: Evidence from the 2001 English census. [doi: DOI: 10.1016/j.healthplace.2010.06.006]. *Health & Place, 16*(5), 1014-1021.

Bielak, A. A. M. (2010). How Can We Not 'Lose It' if We Still Don't Understand How to 'Use It'? Unanswered Questions about the Influence of Activity Participation on Cognitive Performance in Older Age – A Mini-Review. *Gerontology, 56*(5), 507-519.

Boult, C., Green, A. F., Boult, L. B., Pacala, J. T., Snyder, C., & Leff, B. (2009). Successful models of comprehensive care for older adults with chronic conditions: evidence for the Institute of Medicine's "retooling for an aging America" report. *Journal of the American Geriatrics Society, 57*(12), 2328-2337.

Boyle, P. A., Buchman, A. S., Barnes, L. L., James, B. D., & Bennett, D. A. (2010). Association Between Life Space and Risk of Mortality in Advanced Age. *Journal of the American Geriatrics Society, 58*(10), 1925-1930.

Burgess, D. J., Powell, A. A., Griffin, J. M., & Partin, M. R. (2009). Race and the validity of self-reported cancer screening behaviors: Development of a conceptual model. [doi: DOI: 10.1016/j.ypmed.2008.11.014]. *Preventive Medicine, 48*(2), 99-107.

Carlos, O. W. (2011). Frailty and Chronic Diseases in Older Adults. *Clinics in geriatric medicine, 27*(1), 39-52.

Dinour, L. M., Bergen, D., & Yeh, M.-C. (2007). The Food Insecurity-Obesity Paradox: A Review of the Literature and the Role Food Stamps May Play. [doi: DOI: 10.1016/j.jada.2007.08.006]. *Journal of the American Dietetic Association, 107*(11), 1952-1961.

Entwistle, F., Kendall, S., & Mead, M. (2010). Breastfeeding support – the importance of self-efficacy for low-income women. *Maternal & Child Nutrition, 6*(3), 228-242.

Eugene, C. F., David, R. B., & Mary, F. E. (2010). Urban Trails and Physical Activity: A Natural Experiment. *American journal of preventive medicine, 39*(3), 259-262.
Fiscella, K., & Kitzman, H. (2009). Disparities in Academic Achievement and Health: The Intersection of Child Education and Health Policy. *Pediatrics, 123*(3), 1073-1080.
Fish, J. S., Ettner, S., Ang, A., & Brown, A. F. (2010). Association of Perceived Neighborhood Safety on Body Mass Index. *Am J Public Health, 100*(11), 2296-2303.
Fredriksen-Goldsen, K. I., Kim, H.-J., Barkan, S. E., Balsam, K. F., & Mincer, S. L. (2010). Disparities in Health-Related Quality of Life: A Comparison of Lesbians and Bisexual Women. *Am J Public Health, 100*(11), 2255-2261.
Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and Age Patterns of Allostatic Load Scores Among Blacks and Whites in the United States. *Am J Public Health, 96*(5), 826-833.
Gould, E., & Hertel-Fernandez, A. (2010). Early retiree and near-elderly health insurance in recession. *Journal of Aging and Social Policy, 22*(2), 172-187.
Jasienska, G. (2009). Low birth weight of contemporary African Americans: an intergenerational effect of slavery. *American Journal of Human Biology, 21*(1), 2-15.
Kalichman, S. C., & Grebler, T. (2010). Stress and Poverty Predictors of Treatment Adherence Among People With Low-Literacy Living With HIV/AIDS. *Psychosom Med, 72*(8), 810-816.
Keyes, C. L. (2009). The Black-White paradox in health: flourishing in the face of social inequality and discrimination. *Journal of Personality, 77*(6), 1677-1706.
Kuzawa, C. W., & Sweet, E. (2009). Epigenetics and the embodiment of race: developmental origins of US racial disparities in cardiovascular health. *American Journal of Human Biology, 21*(1), 2-15.
Lang, P. O., Michel, J. P., & Zekry, D. (2009). Frailty syndrome: a transitional state in a dynamic process. *Gerontology, 55*(5), 539-549.
Levitt, A. J., Culhane, D. P., DeGenova, J., O'Quinn, P., & Bainbridge, J. (2009). Health and Social Characteristics of Homeless Adults in Manhattan Who Were Chronically or Not Chronically Unsheltered. *Psychiatr Serv, 60*(7), 978-981.
Mello, J. A., Gans, K. M., Risica, P. M., Kirtania, U., Strolla, L. O., & Fournier, L. (2010). How Is Food Insecurity Associated with Dietary Behaviors? An Analysis with Low-Income, Ethnically Diverse Participants in a Nutrition Intervention Study. *Journal of the American Dietetic Association, 110*(12), 1906-1911.
Mustanski, B. S., Garofalo, R., & Emerson, E. M. (2010). Mental Health Disorders, Psychological Distress, and Suicidality in a Diverse Sample of Lesbian, Gay, Bisexual, and Transgender Youths. *Am J Public Health, 100*(12), 2426-2432.
O'Toole, T. P., Buckel, L., Bourgault, C., Blumen, J., Redihan, S. G., Jiang, L., et al. (2010). Applying the Chronic Care Model to Homeless Veterans: Effect of a Population Approach to Primary Care on Utilization and Clinical Outcomes. *Am J Public Health, 100*(12), 2493-2499.
Schnarrs, P. W., Rosenberger, J. G., Satinsky, S., Brinegar, E., Stowers, J., Dodge, B., et al. (2010). Sexual compulsivity, the internet, and sexual behaviors among men in a rural area of the United States. *AIDS Patient Care and STDS, 24*(9), 563-569.

Victora, C. G., Adair, L., Fall, C., Hallal, P. C., Martorell, R., Richter, L., et al. (2008). Maternal and child undernutrition: consequences for adult health and human capital. [doi: DOI: 10.1016/S0140-6736(07)61692-4]. *The Lancet, 371*(9609), 340-357.

ANALYTIC EPIDEMIOLOGY
HLTH 8260/6260/HSRD 8003/PPOL 8665

UNC Charlotte
Department of Public Health Sciences
College of Health and Human Services

Semester & Year

Instructor Information

Name: Larissa R. Brunner Huber, PhD
Email: lrhuber@uncc.edu
Office Phone: (704) 687-8719
Office Hours: TBD; CHHS 427A

Scheduled Meeting Times

TBD Time & Location

Course Catalog Description

Analytic Epidemiology (3): 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 as 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.

Required Text

None.

Required Readings

Published research articles are assigned according to the Reading List. These articles are available on moodle.

Course Objectives

The purpose of this course is to introduce advanced principles and methods of epidemiology. Topics will include measures of association, confounding, effect modification, stratified analysis, and multivariate modeling. The course is also intended to provide an introduction to communicating the results of epidemiological studies. In-class examples and assigned readings will often center on vulnerable populations such as women and children.

Article critiques

There will be 5 individual article critiques. However, you will only need to complete 4 out of the 5 article critiques for a grade. The articles to be critiqued will be posted on the course website. All critiques are due at the beginning of class on the due date indicated

on the attached course outline. If you do not make prior arrangements with me, I will deduct 1 point from your critique for each day that it is late.

Case study

Students will work in small groups to complete a case study. On the day the case study is due, students will turn in one project with all group members' names attached. In addition, the group must provide a written and signed statement indicating the role that each student played in completion of the case study.

Project

Students will work individually to complete a final project related to communicating results of an epidemiological study. Details pertaining to this project will be discussed throughout the semester.

Grading

Final grades for the course will be based on the following:

Individual article critiques	4 @ 25 points each
Group case study	1 @ 100 points
Writing a results section	1@ 25 points
Writing an abstract	1 @ 25 points
Final project	1 @ 100 points

Numerical scores will be converted to a letter grade in the following manner:

A	90-100
B	80-89.9
C	70-79.9
U	<70

University Policies:

Code of Student Responsibility:

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Academic Integrity:

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credit on the work involving dishonesty and further substantial reduction in the course grade. In almost all cases the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office or http://legal.uncc.edu/policies/ps-105.html. Students are expected to report cases of academic dishonesty to the course's instructor.

Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
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Cell Phones in the Classroom

Please be respectful of your fellow classmates and do not allow your phone to ring during class! If you are expecting an urgent call, please put your phone on "silent" or "meeting" mode so it does not disturb those around you and take the call outside of the classroom.

Miscellaneous

The standards and requirements set forth in this syllabus may be modified at any time during the semester. If it becomes necessary to make any changes, I will notify you during class.

The best way to contact me outside of the classroom is via email. If you email me during the week, I will respond to you within 24 hours. If you email me on the weekend or during a university break, it may take longer for me to answer your email.

Class sessions will center around lectures, problem sets, and article critiques. Come to class ready to participate! Please do your readings and bring your calculator to class so you can be actively involved in all class sessions.

Also, keep in mind that as your professor, I do not "give" you grades. **You earn your grade.**

Syllabus Subject to Change: The instructor reserves the right to alter this syllabus based on best practices that fit changing circumstances.

ANALYTIC EPIDEMIOLOGY
HRSD 8003/PPOL 8665/HLTH 6260
Course Outline

DATE	*TOPIC*	*HOMEWORK/READINGS*[*]
1/12	Review of key epi principles	
1/19	Quality assurance and control	Read articles for 1/19 lecture
1/26	Sensitivity analysis	
2/2	Literature reviews, summary tables	
2/9	Environmental exposures	Read articles for 2/9 lecture
2/16	Occupational exposures	Read articles for 2/16 lecture; env. exp article critique due
2/23	Hypotheses and methods	Occup article critique due
3/2	Infectious exposures	Read articles for 3/2 lecture
3/9	NO CLASS	
3/16	Genetic exposures, discuss final project	Read articles for 3/16 lecture; inf. article critique due
3/23	Case study	Genetic article critique due
3/30	Lifestyle exposures	Read articles for 3/30 lecture; Case study due
4/6	Confounding, effect modification, and stratified analysis	Read articles for 4/6 lecture; lifestyle article critique due
4/13	Data analysis plan, results, and dummy tables	
4/20	Discussion, abstract writing	Results write-up due
4/27	Logistic regression, survival analysis, multivariate modeling	Read article for 4/27 lecture; abstract write-up due
5/4	Presenting epidemiological findings, consultations re: final projects	

FINAL PROJECTS WILL BE DUE DURING OUR SCHEDULED FINAL EXAM PERIOD

ANALYTIC EPIDEMIOLOGY
HRSD 8003/PPOL 8665/HLTH 6260
Reading List

1/12	None
1/19	ARIC Quality Assurance and Quality Control Manual Can Men Be Trusted? A Comparison of Pregnancy Histories Reported by Husbands and Wives *(Am J Epidemiol 1993;138:237-42)* Antidepressant Use: Concordance Between Self-Report and Claim Records *(Med Care 2003;41:368-74)* Application of Computer-assisted Interviews to Sexual Behavior Research *(Am J Epidemiol 1999;149:950-4)*
1/26	None
2/2	None
2/9	Childhood Leukemia and Personal Monitoring of Residential Exposures to Electric and Magnetic Fields in Ontario, Canada *(Cancer Causes Control 1999;10:233-43)* Exposure to Residential Electric and Magnetic Fields and Risk of Childhood Leukemia *(Am J Epidemiol 1991;134:923-37)* For critique : Cancer Risks in Populations Living Near Landfill Sites in Great Britain *(British Journal of Cancer 2002;86:1732-6)*
2/16	Video Display Terminals and the Risk of Spontaneous Abortion *(N Engl J Med 1991;324:727-33)* Exposure to Video Display Terminals and Risk of Spontaneous Abortion *(Am J Ind Med 1997;32:403-7)* For critique : Breast Cancer Risk in Airline Cabin Attendants: A Nested Case-control Study in Iceland *(Occup Environ Med 2003;60:807-9)*
2/23	None
3/2	Medical History, Sexual, and Maturational Factors and Prostate Cancer Risk *(Ann Epidemiol 2004;14:655-62)* Sexually Transmitted Diseases and Other Urogenital Conditions as Risk Factors for Prostate Cancer: A Case-control Study in Wayne County, Michigan *(Cancer Causes Control 2005;16:263-73)* For critique: Antiretroviral Therapy During Pregnancy and the Risk of an Adverse Pregnancy Outcome *(N Engl J Med 2002;346:1863-70)*
3/9	NO CLASS

3/16	Biomarkers of Genetic Susceptibility to Cancer: Applications to Epidemiological Studies *(Future Oncology 2005;1:51-6)* Sources of Bias, Effect of Confounding in the Application of Biomarkers to Epidemiological Studies *(Toxicology Letters 1995;77:235-8)* For critique: Cardiovascular Disease in US Patients with Metabolic Syndrome, Diabetes, and Elevated C-Reactive Protein *(Diabetes Care 2005;28:690-3)*
3/23	Case study: To be determined
3/30	Fruit and Vegetable Consumption in Relation to Ovarian Cancer Incidence: the Swedish Mammography Cohort *(British Journal of Cancer 2004;90:2167-70)* Risk of Ovarian Carcinoma and Consumption of Vitamins A, C, E, and Specific Carotenoids *(Cancer 2001;92:2318-26)* For Critique: Self-reported Electrical Appliance Use and Risk of Adult Brain Tumors *(Am J Epidemiol 2005;161:136-46)*
4/6	Interpreting the results of observational research: chance is not such a fine thing *(BMJ 1994;309:727-30)* A Closer Look at Confounding *(Fam Med 1998;30:584-8)*
4/13	None
4/20	None
4/27	Mathematical Modeling Strategies for the Analysis of Epidemiologic Research *(Ann Rev Public Health 1985;6:223-45)*
5/4	None

FINAL PROJECT

The goal of the final project is to give you more experience in writing an epidemiologic research proposal. Below you will find an outline of the pieces that should ultimately be included in a research proposal. For your project, you will be responsible for completing the portions in bold print. Please note the page restrictions given for each section. These page restrictions assume one-inch margins and double-spacing.

The final projects are due during our final exam period on May 11 from 5-7:30pm. During this time, the Ph.D. students enrolled in the class will be asked to do a brief proposal presentation (10-15 minutes in length). If you would like me to review portions of your project prior to the final due date, you must give me these portions during class on 4/27. I will return comments to you on 5/4 so that you have time to incorporate suggestions into your final submission.

Research Proposal Outline

- **I. Title and Abstract (200 words max)**
- **II. Introduction (1-2 pages)**
  - **a. Establish the importance of the topic**
  - **b. Potential relationship between the exposure and the outcome**
  - **c. Gap**
  - **d. Statement of research purpose**
- **III. Literature Review (3-5 pages)**
  - **a. Physiology of exposure and outcome (if applicable)**
  - **b. Epidemiology of exposure and outcome**
  - **c. Methodological challenges in measuring exposure, outcome (if applicable)**
  - **d. Summary, conclusions, and implications**
- **IV. Hypotheses/Specific Aims (1 page)**
- **V. Methods (3-5 pages)**
  - **a. Study design**
  - **b. Study population, recruitment**
  - **c. Exposure assessment**
  - **d. Outcome assessment**
  - **e. Covariate assessment**
  - **f. Data analysis plan**
  - **g. Power and sample size**
- **VI. Study limitations (1-2 pages)**
  - **a. Nondifferential misclassification**
  - **b. Selection bias**
  - **c. Information bias**
  - **d. Confounding**
  - **e. Generalizability**
- **VII. Significance (1 page)**
- **VIII.** Human subject protection (1 page)
- **IX.** Permission to access data (1 page)
- **X. Appendix**
  - **a. Relevant study materials (if applicable)**
  - **b. Dummy tables**

University of North Carolina at Charlotte

College of Health and Human Services

COURSE NUMBER: HLTH8270/STAT 8110-090/ HSRD 8110-090/STAT 7027/8027

COURSE TITLE: Applied Biostatistics: Regression

COURSE Credit and Clock Hours: 3

Pre-requisites: HLTH 6203 or equivalent

FACULTY: Jacek Dmochowski, PhD

Catalog DESCRIPTION: 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.

Course Objectives: The course is designed to meet the PhD competencies as outlined in the PHS/HSR Student Handbook.

- Identify independent and dependent variables when appropriate
- Understand methods of analyzing both quantitative and qualitative data
- Select statistical tests based on data structure and statistical assumptions
- Develop proficiency in using various statistical software packages
- Interpret quantitative and qualitative data

TEXTBOOK: "Applied Regression Analysis and Multivariate Methods", Kleinbaum DG, Kupper LL, Muller KE, Nizam A, 4th edition , 2008 Duxbury Press, ISBN 0-495-38496-8. The 3rd edition is also acceptable since the chapters covered are essentially unchanged, however make sure that assigned problem numbers agree.

STUDENTS SOLUTION MANUAL is available, check URL above for details.

ADDITIONAL USEFUL TEXTS: "Applied Statistics and SAS Programming Language", Cody RP, Smith JK; "SAS System for Regression", Freund R, Littell R; "SAS for Linear Models", Little R, Stroup W, Freund R;

STATISTICAL SOFTWARE: Access to a statistical software package is required for this course. Students are free to use any statistical software (ie. JMP, SPSS or R), but instructions will be provided only for SAS. Knowledge of SAS is not assumed at the beginning of the course. It is not SAS programming course. A copy of SAS can be obtained and installed on students'

personal computers (it is not possible to install SAS on VISTA home edition, students with faculty status can get to SAS via CITRIX server). SAS is available at university computer labs. The University Help Desk is not equipped to answer SAS-related questions. Some installation problems are known to Health Informatics Group in CHHS. Please, let your instructor know if you need a CD copy of SAS. It will not be needed during the first few weeks of class.

TOPICS (chapters): Review (1-3); Simple Linear Regression (5-6); ANOVA table (7); Multiple regression (8-11); Diagnostics (12); Polynomial regression (13); Dummy variables (14); ANCOVA (15); Model Selection techniques (16); Logistic regression (23); Poisson regression (24)

College Grading Policy:

Graduate: 90-100 A, 80-89 B, 70-79 C, Below 70 U

ORGANIZATION OF THE COURSE: Three 50 minute lectures.

EVALUTION METHOD: A number of homework projects will be assigned during the semester. One take home midterm exam and a final take home exam will be given.

40% projects
30% midterm exam
30% final exam

University Policies:

Code of Student Responsibility:
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http://legal.uncc.edu/policies/ps-104.html

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Dean of Students Office or http://legal.uncc.edu/policies/ps-105.html. Students are expected to report cases of academic dishonesty to the course's instructor.

Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
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Syllabus Subject to Change: The instructor reserves the right to alter this syllabus based on best practices that fit changing circumstances.

University of North Carolina at Charlotte
College of Health and Human Services

COURSE NUMBER: HLTH8271/STAT/HSRD 8111

COURSE TITLE: Applied Biostatistics: Multivariate Analysis

COURSE CREDIT AND CLOCK HOURS: 3

PREREQUISITES: HLTH8270/STAT/HSRD 8110 or permission of the instructor

INSTRUCTOR: Jacek Dmochowski, PhD

Catalog DESCRIPTION: 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.

Course Objectives: The course is designed to meet the PhD competencies as outlined in Student Handbook.

- Identify independent and dependent variables when appropriate
- Understand methods of analyzing both quantitative and qualitative data
- Select statistical tests based on data structure and statistical assumptions
- Develop proficiency in using various statistical software packages
- Interpret quantitative and qualitative data

TEXTBOOK: "Applied Multivariate Methods for Data Analysts", Dallas E. Johnson, 1st edition , 1998 Duxbury Press, , ISBN 0-534-23796-7 (not available in campus bookstore)

SUPPLEMENTAL MATERIALS: Handouts and other supplemental materials will be provided mostly in electronic form, so please make sure that your UNCC e-mail is working.

ADDITIONAL USEFUL TEXTS: "Applied Statistics and SAS Programming Language", Cody RP, Smith JK; "Applied Multivariate Statistics with SAS Software", "Multivariate Data Reduction and Discrimination with SAS Software", both books by Khattree R, Naik DN Freun; both books from the series SAS for users; both books can be found at http://support.sas.com/publishing/bbu/index.html.

STATISTICAL SOFTWARE: SAS will be used in the course, but it is not SAS programming course. Elements of SAS/IML will be presented. A copy of SAS can be obtained from the Atkins Library and installed on the home computers. Also SAS is available at university computer labs.

College Grading Policy:

Graduate: 90-100 A, 80-89 B, 70-79 C, Below 70 U

ORGANIZATION OF THE COURSE: Three 50 minute lectures.

Evaluation Method: A number of homework projects will be assigned during the semester. One open book final exam will be given. All the work done outside the classroom should be done without consulting other students. If you have a problem, talk to or e-mail your instructor.

60% projects
40% final exam

TOPICS: Overview (week 1); Matrices and Multivariate Normal Distribution (week 2); Sample correlations and Multivariate Data Plots (week 3) ; Eigenvalues and Eigenvectors (week 4); Principal Components Analysis (week 5); Factor Analysis (week 6-7); Discriminant Analysis (week 8); Cluster Analysis (week 9); Mean vectors and Covariance Matrices (week 10); MANOVA (week 11-12); Canonical Correlation (week 13-14)

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HLTH8272/HSRD 8103
Large Data Sets and Health Services Research

Spring Semester

Course Number:	HLTH8272/HSRD 8103
Course Title:	Large Data Sets and Health Services Research
Course Location:	TBD
Course Credits:	3 graduate semester hours
Course Date & Time:	TBD

Faculty: Dr. James Studnicki
Office Hours: by appointment
Office Location: CHHS 341-C
Office Phone: 704 687 8981
Email: jstudnic@uncc.edu

HSRD 8103 Large Data Sets and Health Services Research: (3) No prerequisite.

Course Description:

Rationale: Existing large scale databases such as birth and death registries, disease registries, hospital discharge data and other survey-derived data are important sources of information for health services research and management related policy studies. Knowledge of these data sources, and methods and techniques for utilizing them are important competencies for Ph.D. students.

Course Objectives:

1. To familiarize the student with major large scale secondary health care databases and the research applications to which they have been applied Students will study the structure of the available databases, the individual indicators included and the data definitions and codes. Published, peer reviewed and typical research applications as well as limitations will be discussed.
2. To familiarize the student with various techniques and methods for preparing and utilizing large scale secondary databases for research purposes. Students will manipulate a selected database in order to generate queries, organize indicators and conduct statistical analyses.

3. To produce a research manuscript of submissable quality on a research topic utilizing a selected large scale database. Students will study the existing literature, formulate a research question and hypothesis, conduct an analysis and generate a set of findings utilizing an existing database.

Course Requirements Students will be required to review various large scale, secondary healthcare databases; understand the tools and techniques used to analyze the data; and, produce a submission-quality research paper utilizing a selected database.

Attendance Policy: More than **two** absences during the semester will bring your grade down by **one letter grade** for each absence unless excused by means of documentation of illness or other emergencies. Attendance for each class period will be taken at the beginning of class. Two late arrivals or early dismissals are equal to one absence.

Syllabus Subject to Change: ***** The instructor reserves the right to alter this syllabus based on best practices that fit changing circumstances.

Required Text:

None: readings assigned based upon selected database and research topic

Evaluation Methods:

1. Classroom Discussions; 20% of grade
2. Assigned exercises: 10% of grade
3. Final Manuscript: 70% of grade

College Grading Scale: *The following grading will be used in this course:*

90% - 100%	A
80% - 89%	B
70% - 79%	C
Less than 70%	U

Additional Sources:

National Center for Health Statistics
www.cdc.gov/nchs

Need a Computer?

UNC Charlotte students may visit computer labs at various sites across campus. For information on location of computer labs and equipment available, call 687– 3100 and select option one (1) or check UNC Charlotte on the World Wide Web: http://www.uncc.edu/lis.

Week	Date	Topics	Readings
Week 1	**Jan. 9**	Introduction to the course • Objectives • Approach • Assignments	
Week 2	**Jan. 16**	Toolkit – Relational data bases and SQL	
Week 3	**Jan. 23**	Access and ODBC • National Survey of Children with Special Healthcare Needs • Student Presentation • Problem Definition	
Week 4	**Jan. 30**	SAS Workshop • National Hospital discharge Survey (NHDS) • Student Presentation • Specifying Objectives - The Research Question - Operationalizing the Question - Specifying Variables	
Week 5	**Feb. 6**	Excel as an analysis engine • National Survey of Family Growth (NSFG) • Student Presentation • Descriptive Statistics - Structuring the Description of the Study Population - Interpretation - Restating the Question	
Week 6	**Feb. 13**	Web data sources and format conversions ("screen scraping") • National Nursing Home Survey (NNHS) • Student Presentation • Literature review • Methods	
Week 7	**Feb. 20**	Data warehouses and portals • National Health Interview Survey (NHIS) • Student Presentation • Final Topic Selection • Group Organization • Journal Selection	
Week 8	**Feb. 27**	• National Hospital Ambulatory Medical Care Survey (NHAMCS) • Student Presentation	

		• **Draft** Problem Identification and Objectives	
Week 9	**Mar. 5**	Spring break	
Week 10	**Mar. 12**	• Database- "Falls"- TBA • Student Presentation (EN Tait) • **Draft** Methodology	
Week 11	**Mar. 19**	• Analysis of Data - issues, approaches, problems	
Week 12	**Mar. 26**	• **Draft** Figures/tables	
Week 13	**Apr. 2**	• **Draft** Literature Review	
Week 14	**Apr. 9**	• **Draft** Findings/Discussion	
Week 15	**Apr. 16**	• **Draft** Entire Manuscript	
Week 16	**Apr. 23**	• Submission • Review	

University Policies:

Code of Student Responsibility:
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Academic Integrity:
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Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-

51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
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HLTH 8281/HLTH 6281 Measurement and Scale Development

Spring 20XX

Time: XXXX

Location: XXX

This syllabus contains the policies and expectations I have established for HLTH8281 (cross-listed with HLTH 6281). Please read the entire syllabus carefully before continuing in this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Unless you are prepared to abide by these policies and expectations, you risk losing the opportunity to participate further in the course.

I will conduct this class in an atmosphere of mutual respect. I encourage your active participation in class discussions. Each of us may have strongly differing opinions on the various topics of class discussions. The conflict of ideas is encouraged and welcomed. The orderly questioning of the ideas of others, including mine, is similarly welcomed. However, I will exercise my responsibility to manage the discussions so that ideas and argument can proceed in an orderly fashion. You should expect that if your conduct during class discussions seriously disrupts the atmosphere of mutual respect I expect in this class, you will not be permitted to participate further.

The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class and/or at the MOODLE site for this course, where this syllabus and other pertinent course information, assignments, and resources will be posted.

Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations.

HLTH 8281 Measurement and Scale Development (3 credits, doctoral)
HLTH 6281 Measurement and Scale Development (3 credits, graduate)

Pre-requisites: HLTH 8201
Time: XXXX
Location: XXXX

Instructor contact information; office hours, etc

Course Description (Catalog)

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 health 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.

This course contributes to the following Public Health Sciences PhD competencies:

- Compare across research methods and allied philosophical traditions
- Identify the inadequacies in existing measurement instruments and procedures that need to be challenged
- Understand methods of analyzing both quantitative and qualitative data
- Develop quantitative measures to assess theoretical constructs
- Develop psychometrically sound quantitative measurement tools
- Develop proficiency in using various statistical software packages

Instructional Objectives

By the end of this course, the student will:

1. Use a theoretical or conceptual model to characterize the domains needed for a comprehensive measurement of a given health construct.
2. Develop a list of items/measures reflective of a given health construct.
3. Select an appropriate response scale for a given item
4. Apply and interpret statistical techniques to reduce a list of potential items into a coherent measure.
5. Develop a scale measurement scheme from a series of coherent items.
6. Assess the reliability and validity of a scale with special emphasis on
    a. cross-cultural, cross-national, and native language considerations
    b. diversity/vulnerability of the target population
7. Critically contrast and compare similar health measures and select an appropriate health measure for a given situation.

Required Texts

DeVellis RF. Scale Development: Theory and Applications,3rd Edition (Applied Social Research Methods Series, volume 26), Sage Publications, 2011. ISBN-13: 978-1412980449.

Streiner DL, Norman GR. Health Measurement Scales: A practical guide to their development and use, Oxford university Press, 2008. ISBN-13: 978-0199231881.

Grades

The course is comprised of the following graded elements.

	Assignment	Due date
35%	In-class Practical Exercises (3 @ 5%, 2 @ 10%)	Various
15%	Comparison paper – use of measures in two published studies	Session 11
30%	Content examination	Session 12
15%	Term Paper – Assessing a Health Indicator	Session 14
5%	Presentation of Health Indicator Assessment	Session 15

Final grades will be based on the standard decile grading scale. TOTAL POSSIBLE: 100 points.

≥90	A
≥80, <90	B
≥70, <80	C
<70	U

Course Policies

Cells phones and other technology: The use of cell phones, beepers, or other communication devices is disruptive, and is therefore prohibited during class. Note: During exam situations, use of such devices may be construed as cheating and appropriate measures taken as an academic ethics violation.

Communication. E-mails are generally answered within 24 hours when received during the hours of Monday – Friday, 9am to 4pm. Messages outside these hours will be responded to as soon as is practical.

Attendance Policy: As noted above, class preparation, participation, and attendance are expected. In instances of group activities and assignments, your group members (and their grades) depend upon the full participation of all members. Attendance and preparation will be assessed within the framework outlined above and may include several unannounced brief written exercises ("pop quizzes") and in class exercises throughout the semester. If you will be unable to attend class, you are expected to inform the instructor and the members of your group as soon as is practical. Many assignments are experiential and are not easily 'made up.'

Late policy: Other than the in-class examinations, all assignments are to be submitted electronically via email to EMAIL (not via moodle). This procedure provides a date/time stamp. If you do not receive a confirmatory email by the deadline, then I have not received your assignment and it will be considered late. Barring an acceptable explanation and unless otherwise specified for a given assignment, late assignments incur the following penalties: within the first 12 hours after the due date, a 10% deduction will be taken; within 12-48 hours, a 20% deduction is taken; and after 48 hours assignments are not accepted. Exceptions will be made for extreme circumstances, but it behooves you to notify me as soon as possible, preferably before the due date. {Remember, it is OK to submit BEFORE the deadline}

Lecture Sequence

Session	Topic(s)	Readings/Assignments
1	Course introduction Overview of measurement issues Conceptual model and domains	Streiner Ch 1,2 Devellis Ch 1,2, 5
2	Devising items Practical Exercise 1 – writing items & scaling responses *Articles assigned for Comparison Paper*	Streiner Ch 3 *PDFs posted on Moodle*

3	Scaling responses Practical Exercise 2 - item scaling *Practical Exercise 1 (5%) write-up due*	Streiner Ch 4
4	Item selection & reduction *Practical Exercise 2 (5%) write-up due*	Streiner Ch 4, 12
5	Design/user considerations *Select term paper scale/measure*	Streiner Ch 6, 13, 14 DeVellis Ch 7
6	Constructing indices and scales Practical Exercise 3 – scale development	Streiner Ch 6 DeVellis Ch 6
7	Scale assessment – reliability and validity Practical exercise 4 – reliability *Practical Exercise 3 write-up due (10%)*	*Streiner Ch 8-10* *Devellis Ch 3,4*
8	Scale assessment – reliability and validity Practical Exercise 5 – validity *Practical Exercise 4 write-up due (10%)*	
9	Scale responsiveness - sensitivity to change *Practical Exercise 5 write-up due (5)%* *Review expectations for Comparison Paper*	Streiner Ch 11
10	Synthesis: Case Study – MOS/ SF36 *Comparison Paper due (15%)*	DeVellis Ch 8 Readings/PDF on Moodle
11	Review for Exam	
12	CONTENT EXAM (30%)	
13	*Individual meetings on term paper*	
14	Case Studies – SIP; SRH *Term Paper due (15%)*	Readings/PDF on Moodle
15	Presentations (in lieu of final) (5%)	**Time TBA**

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Violations of academic ethics will be strictly enforced and severely punished, with penalties ranging from deductions of points, to a zero for an assignment, to a failing grade for the course (or something more severe if the incident is taken to the Academic Integrity Board).

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Additional readings:

Choi, B. C. K., & Pak, A. W. P. (2005). A catalog of biases in questionnaires. *Preventing Chronic Disease, 2*(1). www.cdc.gov/pcd/issues/2005/jan/04_0050.htm

Scientific Advisory Committee, Medical Outcomes Trust. Instrument review criteria. *Medical Outcomes Trust Bulletin*, September 1995:I-IV.

Ware, J. E. Jr., & Sherbourne, C. D. (1992). The MOS 36-Item Short-From Health Survey (SF-36): I. Conceptual Framework and Item Selection. *Medical Care*, 30(6):473-483.

McHorney, C. A., Ware, J. E. Jr., & Raczek, A. E. (1993). The MOS 36-Item Short -From Health Survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. *Medical Care*, 31(3):247-263.

Mallinson, S. (2002). Listening to respondents: A qualitative assessment of the Short Form 36 Health Status Questionnaire. *Social Science & Medicine, 54*, 11-21.

SF36 instrument

OTHERS FOR TBA

SPECIFICATION OF GRADED ASSIGNMENTS

Common Elements. For all written assignments, the document will have 1" margins on all sides, Times Roman 12 point font (or Arial 11 point). Body text will be double-spaced (tables, figures, references, etc may be single-spaced). References are to consistently follow either the AMA (sequential numbering) or APA (author-date) styles. Stated page limits for an assignment **exclude** cover page, tables, figures, references and appendices.

Assignments are to be submitted electronically to the instructor via email (email address) by the stated deadline. Files are to be named using the following convention: LASTFirst_AssignmentName.doc or .docx. The document shall have the student's name on the cover page or top of first page.

My emphasis is on providing detailed, constructive criticism, focusing on the quality of the argument (critical/analytic thinking) and use of theory, data, and references to support assertions, conclusions, and recommendations.

In-class practical exercises (35%** - 3 @ 5%, 2 @ 10%**)

Many lectures will have an associated practical exercise (individual and small group) to enrich the students' understanding and facility with the concepts and issues raised in the lecture as well as to provide a sense of the practical challenges faced in scale construction. Each exercise will include a case summary, supporting materials/readings, a process outline, and a series of questions to be answered or a product to be developed. The session will conclude with a class discussion that will provide a common understanding prior to the students preparation and submission of the written response for grading (which will be due the following session).

Content Examination (30% each)

The in-class content examination shall address core knowledge and applications of knowledge and principles within practical settings. The examination will involve a mix of question formats (e.g., short answer, multiple choice, and brief or extended essays). The stated course and lecture objectives will guide student preparation for this examination.

Comparison Paper (15%)

Using published, peer-reviewed articles, the Comparison Paper requires students to compare and contrast two different measures of the same phenomenon. The 5-7 page paper will generally follow the sequence of appraisal dimensions of scale development utilized in the course (see outline and scoring rubric below). Students will be able to develop sections of the paper in parallel to the class discussion, resulting in a final submission of the paper at the end of the course didactic phase.

Comaprison Paper Outline & Scoring Rubric

The logical development of the paper will address the substantive questions below, usually in this or another logically defensible order of presentation. The headings are to be interpreted as guiding ideas around which to develop paragraph or multi-paragraph responses as part of the paper. The paper itself should flow as an integrated document and not be a disconnected series of responses to implicit questions (topic paragraphs, transitions, concluding sentences, etc.) using the outline below (point values, scored to nearest 0.5, are listed in parentheses).

___(1) INTRODUCTION: Briefly introduce the construct/measure of interest and identify the main articles being used?

____(2) RESEARCH QUESTIONS/HYPOTHESES & CONCEPTUAL MODELS: Describe, compare/contrast the hypotheses/research questions and the underlying conceptual model(s)

____(3) MEASUREMENT SCALES & ANALYTIC STRATEGIES: Describe the measurement scale(s) used in each study and assess their appropriateness for the state hypothesis/research question.

____(3) RELIABILITY ASSESSMENT: Describe and assess the reliability of the measurement scales as reported in the articles (either explicitly or implicitly). Assess the underlying reliability of the measurements scales (drawing on cited references or other published works).

____(3) VALIDITY ASSESSMENT: Describe and assess the multiple dimensions of validity (either implicitly or explicitly) of the measurement scales (overall and specific to the current study population)

____(1) HUMAN SUBJECT CONCERNS: Assess whether appropriate consideration was given to human subjects and diversity/vulnerable population concerns.

____(2) OVERALL ASSESSMENT: Based on the prior analysis and in consideration of the overall study design, summarize the analysis, identify which article employed the most appropriate and robust measurement scale, justifying the position taken. {Adherence to formatting and other requirements also assessed here.}

Term Paper (15%) and Presentation (5%)

Term Paper. Students will demonstrate their mastery and integration of core concepts by finding published, peer-reviewed articles and other sources detailing the development and application of a health measurement scale of interest to their own research agenda (and approved by the course instructor to avoid/minimize duplication and address other considerations). As detailed in the outline and scoring rubric below, students will summarize the development of an established measurement scale and critically

appraise its rigor, robustness, and suitability for various uses and populations in a 10-12 page paper.

Term Paper Outline & Scoring Rubric

The logical development of the paper will address the substantive questions below, usually in this or another logically defensible order of presentation. The headings are to be interpreted as guiding ideas around which to develop paragraph or multi-paragraph responses as part of the paper. The paper itself should flow as an integrated document and not be a disconnected series of responses to implicit questions (topic paragraphs, transitions, concluding sentences, etc.) using the outline below (point values, scored to nearest 0.5, are listed in parentheses).

___(1) INTRODUCTION: Briefly introduce the construct/measure of interest

____(2) CONCEPTUAL MODEL: Describe the measurement's underlying conceptual model and intended uses.

____(3) MEASUREMENT SCALE: Describe the measurement scale's development process, including item selection, response scaling, scale/index calculation procedures , responsiveness

____(2) RELIABILITY ASSESSMENT: Describe and assess the reliability of the measurement scale.

____(2) VALIDITY ASSESSMENT: Describe and assess the measurement scale' multiple dimensions of validity.

____(1) DATA SOURCES: Describe the requisite data sources that provide the needed inputs for the measurement scale and assess (from a practical/administrative perspective) the burden, cost, and other considerations in determining the suitability of the instrument for research and/or monitoring purposes.

____(1) INDEPENDNCE: Assess the independence of the inputs from the desired outcomes to assess

____(1) LIMITATIONS: Summarize and assess any known or suspected shortcomings of the measurement scale

____(2) OVERALL ASSESSMENT: Based on the prior analysis, summarize and assess the measurement scale, the analysis of its rigor/robustness, and its intended and potential uses/applications.

Presentation. In lieu of a final exam, students will prepare and deliver a 10-minute presentation of the paper to the class, followed by brief Q&A. This exercise will provide practical public speaking experience to a professional/collegial audience, improve skills in responding to unscripted questions, and prepare students for their proposal defense. The presentation is to convey a sense of the measurement scale and its rigor and uses that would enable the audience to critically consider the use of the scale in their own research or when reading published literature. As indicated in the scoring rubric below, the emphasis of this exercise is not on the content per se (that is graded as part of the written assignment) but on the selection and presentation of content to inform and engage the audience. [Held during scheduled final exam time set by Registrar]

PRESENTATION CRITIQUE RUBRIC

For each of the 7 criteria, a whole number score of 0, 1, 2, 3, 4, or 5 will be assigned.

A score of 0 indicates that the criterion was not addressed.

A score of 3 indicates that the criterion was appropriately met for a doctoral graduate.

A score of 5 indicates that the criterion was met at an exceptional level for a doctoral graduate.

1. Content _____

Was the target audience identified?
Was the problem clearly identified and defined?
Were the determinants explained?
Were alternate strategies addressed?
Was a course of action recommended?
Was the recommended course of action supported?

2. Organization _____

Was the content organized and presented in a coherent manner?
Were new or unfamiliar terms explained?
Did the presentation flow smoothly?

3. Style _____

Did the speaker(s) hold your interest?
Was/were the speaker(s) convincing/effective?
Was/were the speaker(s)' voices loud enough? understandable?
Did the speaker(s) make eye contact with the audience?

4. Audio-visuals _____

Were transparencies/slides used effectively? {not cluttered, readable}
Was an appropriate number of visual aids used?
Were visuals clearly explained?
Did the visuals add to the presentation?

5. Time Utilization _____

Was the time appropriately allocated to the parts of the presentation?
Were the time constraints followed?
Did it appear that the presentation had been rehearsed?

6. Questioning _____

Were questions appropriately addressed?
Did the speaker(s) interact with the audience?

7. Overall Impression _____

Was a compelling argument made?
Was the presentation convincing?

TOTAL {The total may range from 0 to 35} _____

Scaled Score _____ (out of 5)

HLTH 8282 Health Survey Design and Research
Fall 20XX
Time: XXXX
Location: XXX

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HLTH 8282 Health Survey Design and Research (3 credits, doctoral)

Pre-requisites: HLTH 8281; Pre – OR- Co-requisites 8281 OR HLTH 6281
Time: XXXX
Location: XXXX

Instructor contact information; office hours, etc

Course Description (Catalog)

This course covers the practical aspects of designing (or selecting) quantitative survey instruments related to health status and health determinant 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.

Prerequisites: HLTH 8201; Pre-or-Co-requisites: HLTH 8281 or HLTH 6281

This course contributes to the following Public Health Sciences PhD competencies:

- Identify the inadequacies in existing measurement instruments and procedures that need to be challenged
- Develop psychometrically sound quantitative measurement tools
- Develop standardized research protocols for primary data collection in the field using quantitative, qualitative, and mixed methods

Instructional Objectives

By the end of this course, the student will have:

- Developed and applied a knowledge base relevant to the design and conduct of a health survey
- Collaboratively developed/designed a health survey instrument adapted to the culture and diverse needs of the target population
- Collaboratively applied sampling methodology to a practical situation
- Collaboratively designed a research protocol in compliance with ethical standards and sensitivity to diverse and vulnerable populations
- Conducted a community-based health survey (interview)
- Entered survey data into a dataset a using statistical package
- Participated in the design, planning, conduct, and analysis/preliminary reporting phases of a survey
- Developed and practiced goal-oriented team functioning and management skills

Required Texts

Fowler FJ, Jr. Survey Research Methods, 4th Edition, Volume 1 in Applied Social Research Methods Series, Bickam L & Rog DJ (eds). Sage Publications, 2009. ISBN-13: 978-1412958417.

Alreck PL, Settle RB. The Survey Research Handbook, 3rd Edition. McGraw-Hill/Irwin, 2004. ISBN-13: 978-0072945485.

Optional/recommended text.

Kulas JT. SPSS Essentials: Managing and Analyzing Social Sciences Data. John Wiley & Sons, 2009. ISBN-13: 978-0470226179.

Grades

The course is comprised of the following graded elements.

	Assignment	Due date
15%	Written Group Report #1	Varies
5%	Oral Group Presentation #1	Varies
15%	Written Group Report #2	Varies
5%	Oral Group Presentation #2	Varies
40%	Content Exam	
15%	Final Class Report	
5%	Final Class Presentation	

Final grades will be based on the standard decile grading scale. TOTAL POSSIBLE: 100 points.

≥90	A
≥80, <90	B
≥70, <80	C
<70	U

Lecture Sequence

Session	Topic(s)	Readings/Assignments
1	Course introduction Purpose/overview of surveys Relationship to instrumentation	Alreck Ch 1,2 Floyd Ch 1
2	Research design & sampling Item/Questionnaire development *Group work - organizing; selecting topic*	Alreck Ch 3, 4 Floyd Ch 3, 4
3	Item wording Response scales *Group 1 Presentation - RQ*	Alreck Ch 5,6 Floyd Ch 6, 7
4	Design & lay-out consideration Adapting existing items/instruments *Group 1 Report due*	Alreck Ch 7 Floyd Ch 5
5	Understanding & minimizing errors Pre-testing *Group 2 Presentation – Draft Instrument* *Group 5 Preliminary Presentation – Operational Plan*	Alreck Ch 8 Floyd Ch 2
6	Protocol development Ethical considerations *Group 3 Presentation – Sampling Methodology* *Group 2 Report due*	Floyd Ch 11
7	Planning - operational logistics Budgeting Personnel Time/coordination *Group 4 Presentation –Ethics* [Mock IRB meeting]	Floyd Ch 8
8	Fielding Management Oversight	Floyd Ch 13

	Quality Assurance *Group 5 Presentation – Training and Fielding Plan* *Group 4 Report due*	
9	Data processing and management Data analysis & reporting *Group 5 Report due* *Fielding begins*	Alreck Ch 9-12, Appendix C Floyd Ch 9, 10, 12
10	*Group 6 Presentation* Field work updates/debriefing *Fielding continues*	
11	*Fielding continues* *Group 6 Report due*	
12	*Fielding continues*	
13	Group 7 preliminary presentation Review	
14	Content Exam *Group 7 Report due*	
15	Group 5 facilitated class presentation (in lieu of final) *Final Composite Report due*	**Time TBA**

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Note specific to this course: This course involves elements of individual and group assignments. Those assignments where group effort is expected/required are marked as such. (Remember: all members of a group are accountable for assignments submitted by the group.) In some cases, students are asked to discuss collectively, but

to summarize in writing individually. In all other cases, students are expected to work independently.

Violations of academic ethics will be strictly enforced and severely punished, with penalties ranging from deductions of points, to a zero for an assignment, to a failing grade for the course (or something more severe if the incident is taken to the Academic Integrity Board).

Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

All students are required to abide by the UNC Charlotte Sexual Harassment Policy (http://www.legal.uncc.edu/policies/ps-61.html) and the policy on Responsible Use of University Computing and Electronic Communication Resources (http://www.legal.uncc.edu/policies/ps-66.html). Sexual harassment, as defined in the UNC Charlotte Sexual Harassment Policy, is prohibited, even when carried out through computers or other electronic communications systems, including course-based chat rooms or message boards.

Religious Accommodation:
It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester http://legal.uncc.edu/policies/ps-134.html. The census date for each semester (typically the tenth day of instruction) can be found in UNC Charlotte's Academic Calendar (http://registrar.uncc.edu/calendars/calendar.htm).

Course Policies
Cells phones and other technology: The use of cell phones, beepers, or other communication devices is disruptive, and is therefore prohibited during class. Note: During exam situations, use of such devices may be construed as cheating and appropriate measures taken as an academic ethics violation.

Communication. E-mails are generally answered within 24 hours when received during the hours of Monday – Friday, 9am to 4pm. Messages outside these hours will be responded to as soon as is practical.

Attendance Policy: As noted above, class preparation, participation, and attendance are expected. In instances of group activities and assignments, your group members (and

their grades) depend upon the full participation of all members. Attendance and preparation will be assessed within the framework outlined above and may include several unannounced brief written exercises ("pop quizzes") and in class exercises throughout the semester. If you will be unable to attend class, you are expected to inform the instructor and the members of your group as soon as is practical. Many assignments are experiential and are not easily 'made up.'

Late policy: Other than the in-class examinations, all assignments are to be submitted electronically via email to INSTRUCTOR (not via moodle). This procedure provides a date/time stamp. If you do not receive a confirmatory email by the deadline, then I have not received your assignment and it will be considered late. Barring an acceptable explanation and unless otherwise specified for a given assignment, late assignments incur the following penalties: within the first 12 hours after the due date, a 10% deduction will be taken; within 12-48 hours, a 20% deduction is taken; and after 48 hours assignments are not accepted. Exceptions will be made for extreme circumstances, but it behooves you to notify me as soon as possible, preferably before the due date. {Remember, it is OK to submit BEFORE the deadline}

Additional readings:
TBA

SPECIFICATION OF GRADED ASSIGNMENTS

This course reflect a balance of individual (content, theory) and group (practice) components. Graded activities reinforce and build upon one another throughout the course. This course requires extensive, coordinated, time sensitive effort outside of class.

Group Tasks

Each student will participate in 2 groups. *Note: Due to the inherent workload and protracted nature of the task assigned these groups, Groups 2 and 5 will be considered the equivalent of 2 groups and the assignments will count double.*

Each group will prepare a "written" report (by providing an electronic version to the instructor) and give an oral presentation/briefing to the assembled class in accordance with the project schedule disseminated at the start of the class. See scoring rubrics for reports and presentations below.

The written report is due to the instructor (in electronic format) by TIME on the day specified in the schedule, usually the session following the (final) oral presentation. This procedure allows for changes introduced by the class discussion to be included in the final report. Late submission will result in a penalty starting at 5% and increasing with the degree of lateness. The oral report need not involve all group members having speaking roles. Groups are free to utilize any appropriate presentation media. The program can provide only those media normally available in the classroom (doc cam, LCD projector, internet connection, DVD/VRC, etc).

The assembled class will act as the Steering/Oversight Committee for the implementation of the survey under the guidance of the "Group 5" Executive Committee. Each group operates as a subcommittee of the "Executive Committee" and the Executive Committee reports to the instructor for final decisions. (All groups must be prepared to accept substantial changes/directions from the class/instructor, and the

inherent additional work this entails.) The reports should emphasize an analysis of the background and existing information with clear recommendations for specific actions appropriate to the tasks assigned to the group as well as any 'deliverable' product.

The group should organize the format of the written report consistent with their objectives and established best practices. Formats proscribed for previous courses, published references and peer-reviewed literature may be used as guides.

The discrete group efforts, when compiled and synthesized, reflect a complete accounting of the design, administration, and preliminary reporting of a health survey.

Group1: Defining Research Variables and Questions

- Introduce subject/rationale for the investigation
- Review and Summarize literature on the subject
- Review and Summarize qualitative research
- Propose study objectives, research questions, and hypotheses

Group 2: Developing Instrument**

Based upon group 1 recommendations -

- Develop questionnaire items
- Develop the format/design/layout of the instrument
- Pre-test questionnaire
- Revise/adapt questionnaire
- Develop administration/interviewer component of protocol
- Work with Group 5 (Executive Committee) during survey fielding to address issues that arise

Group 3: Developing Sampling Methodology

- Characterize Population
- Characterize Target Population
- Characterize Sampling Frame
- Recommend sampling strategy
- Discuss advantages and disadvantages of recommended strategy, alternatives considered, technical feasibility, etc
- Describe sample [added after class agrees on methodology]

Group 4: Ethical Considerations

- Assess potential risks/benefits to all parties who may be affected by the survey with respect to the proposed study methodology
- Address issues of confidentiality, anonymity, and informed consent
- Draft an informed consent statement
- Prepare an IRB packet for the UNC Charlotte IRB

Group 5: Implementation**

[all students involved in administering surveys]

- Management/Monitoring Plan
- Training Plan and conduct training to appropriately administer the survey and comply with the sampling protocol (Coordinate with group 2 component)
- Oversee/coordinate administration of surveys

- Assure compliance with protocols

Group 6: Data Entry
- Select software
- Design/Layout data entry
- Oversee data entry
- Implement data cleaning

[all students will enter survey data]

Group 7: Analysis & Report Writing
Prepare the preliminary (descriptive) analysis
Compile all groups' reports with addition of descriptive analysis/results section into a final/composite report [Coordinate with Group 5]

Content Examination (40% each)

The Content Examinations (40% each) shall address core knowledge and applications of knowledge and principles within practical settings. The examination will involve a mix of question formats (e.g., short answer, multiple choice, and brief or extended essays). The stated course and lecture objectives will guide your study and preparation for these examinations.

Written Reports (3 @ 15% each)

As noted above, students will develop a report format consistent with their assigned objectives and any standard/templates adopted by the class as whole.

Common Elements. The reports will have 1" margins on all sides, Times Roman 12 point font (or Arial 11 point). , Body text will be double-spaced (tables, figures, references, appendices, etc may be single-spaced). References are to consistently follow either the AMA (sequential numbering) or APA (author-date) styles.

The report will be submitted electronically to the instructor via email to EMAIL (do not submit via moodle). Files are to be named using the following convention: LASTFirst_Assignment.doc or .docx. The document shall have the student(s)' name on the cover page or top of first page

Evaluation Guidelines. My emphasis is on providing detailed, constructive criticism, focusing on the quality of the argument (critical/analytic thinking) and use of theory, data, and references to support assertions, conclusions, and recommendations.

Presentations (3 @ 5% each)

Students will present and defend their report/analysis/proposed course of action to the instrtucto and class acting as the "Steering Committee." Groups will have 30 minutes for their formal/prepared presentation (50 for the final class presentation). Approximately 10 minutes (30 for the final presentation) will be allocated for questioning from the audience, moderated by the course faculty.

This exercise will provide practical public speaking experience to a professional/collegial audience, improve skills in responding to unscripted questions, and prepare students for their proposal defense.

The emphasis of this exercise is not on the content per se (that is graded as part of the written assignment) but on the selection and presentation of content to sell the audience on the proposal.

Presentation skills will be scored using the rubric two pages below

Report Scoring Rubic -

Evaluation Guidelines: "Reports"

Each report is different in content and format and will be judged against the specific requirements/expectations described for the various groups. These general guidelines will be modified and used to assess each group's 'report.'

Content {the most important} --- 12pts max
- Are the required elements present? -2pt
- Are the required elements addressed in sufficient/appropriate detail?-2pts
- Are alternatives discussed/evaluated (where appropriate)?-1pts
- Is a balanced/objective presentation made? - 2 points
- Is the product sufficient (quantity, quality) to allow the groups to advance?-3pts
- Overall coherence/completeness of content - 2 pts

Organization --- 2 pts
- Is the report organized and presented effectively relative to its objective? -1.5pt
- Does the presentation flow logically? -0.5pt

Style ----1 pts
- Is the report well written and displayed (relative to the format)? - 1 pts

PRESENTATION CRITIQUE RUBRIC

For each of the 7 criteria, a whole number score of 0, 1, 2, 3, 4, or 5 will be assigned.
A score of 0 indicates that the criterion was not addressed.
A score of 3 indicates that the criterion was appropriately met for a doctoral graduate.
A score of 5 indicates that the criterion was met at an exceptional level for a doctoral graduate.

1. Content _____
- Was the target audience identified?
- Was the problem clearly identified and defined?
- Were the determinants explained?
- Were alternate strategies addressed?
- Was a course of action recommended?
- Was the recommended course of action supported?

2. Organization _____
- Was the content organized and presented in a coherent manner?
- Were new or unfamiliar terms explained?
- Did the presentation flow smoothly?

3. Style _____
- Did the speaker(s) hold your interest?
- Was/were the speaker(s) convincing/effective?
- Was/were the speaker(s)' voices loud enough? understandable?
- Did the speaker(s) make eye contact with the audience?

4. Audio-visuals _____
- Were transparencies/slides used effectively? {not cluttered, readable}
- Was an appropriate number of visual aids used?
- Were visuals clearly explained?
- Did the visuals add to the presentation?

5. Time Utilization _____
- Was the time appropriately allocated to the parts of the presentation?
- Were the time constraints followed?
- Did it appear that the presentation had been rehearsed?

6. Questioning _____
- Were questions appropriately addressed?
- Did the speaker(s) interact with the audience?

7. Overall Impression _____
- Was a compelling argument made?
- Was the presentation convincing?

TOTAL {The total may range from 0 to 35} _____

Scaled Score _____ **(out of 5)**

University of North Carolina at Charlotte
College of Health and Human Services

Course Number: HLTH 8601/6361

Course Title: Ethics in the Public Health Profession

Course Credit and Clock Hours: 3 credits

Pre-requisites and/or Co requisites: None

Faculty: TBD

Catalog Description: 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.

Course Objectives:
The Primary Objectives of this course are to:

1. Understand the major ethics concepts relevant to public health
2. Understand issues of individual autonomy versus protection of public welfare in designing and conducting health research
3. Be able to analyze ethical issues arising from public health
4. Be competent in analyzing public health research and interventions from an ethics perspective
5. Discuss how moral and ethical belief systems might impact the ability to provide non-judgmental attitude in a diverse, public health environment

This course meets the following PhD competencies:

1. Understand how the profession and its research is viewed in the community
2. Connect one's research to the work of practitioners and community members in the field
3. Ground research questions in practice, reflective of the needs of and priorities of the community, as well as theory
4. Engage communities as partners in the research process
5. Communicate research findings in ways that lay people can understand
6. Articulate the strengths and weaknesses of various methods of inquiry, including those selected for use in an investigation
7. Understand characteristics of different audiences
8. Gain experience with different genres and forms of dissemination (e.g. dissertation, empirical article, conceptual analysis, press release)
9. Write precisely and plainly for technical and general audiences

10. Present oral research effectively in professional and public forums
11. Demonstrate/understand the parameters of professional practice
12. Apply principles of responsible conduct of research (RCR)
13. Develop research protocols and materials that protect the privacy of individuals and communities involved in health research
14. Demonstrate cultural sensitivity in ethical discourse and analysis
15. Understand issues of individual autonomy versus protection of public welfare in designing and conducting health research

Syllabus Subject to Change: The instructor reserves the right to alter this syllabus based on best practices that fit changing circumstances.

Required Texts:
Dawson A. & Verweij M. (2007) Ethics, Prevention, and Public Health. New York. Oxford University Press

Jennings B, Kahn K, Mastroianni A & Parker, LS. (2003) Ethics and Public Health: Model Curriculum. Health Resources Administration, 2003

Grades:

Graduate: 90-100 A, 80-89 B, 70-79 C, Below 70 U

Department or Course Policies: List any other department policies here and/or course policies i.e. use of cell phones, tardiness, absences, etc.

Evaluation Methods:

Assignment	Assignment weight
IRB Tutorial	3%
IRB Application	5%
Consent Form	5%
Reflection papers (5 papers, 2% each)	10%
Journal Article Critiques (3 critiques, 5% each)	15%
Class Participation	7%
Case Study Paper and Presentation	15%
Midterm Exam	20%
Final Exam	20%

IRB Training: To provide students with information about the regulatory requirements for conducting human subjects research, students must complete appropriate training required by UNC Charlotte. It reviews core concepts for the responsible conduct of research with human subjects. See https://www.citiprogram.org/Default.asp? Students must provide the instructor with appropriate documentation as evidence of completion.

IRB Application: Students will identify an area of research interest—a project in development for another class is encouraged—and draft an IRB application. For the purposes of this assignment, assume your project involves primary data collection among humans—no secondary data analysis.

Consent Form: The IRB application will require a consent form. Using the UNC Charlotte IRB guidelines draft a consent form. If your population involves children you may need to draft a consent form for parents and an assent form for children.

Reflection Papers: Students will write a reflection paper to reinforce what has been learned through lectures, discussions, and activities presented in class and in the readings. Most reflection papers are two-three pages in length. The paper will extensively reflect on the issues discussed in class, providing insightful opinions and ideas of the author. Your reflection paper is not a random free-flow of ideas. It needs to grab the interest of the reader and present ideas in a clear, concise, and cogent manner.

Journal Article Critiques: Students must demonstrate the ability to conduct academic research utilizing any resources available to them. This assignment will focus on locating and critiquing one specific **scholarly journal article** pertaining to ethical concern in Public Health. Students will provide a maximum of four different sources (newspaper, web site, government document, trade and/or popular magazine) based on the topic of the article, The purpose of this assignment is to evaluate the content of a wide range of sources and to better understand the conceptual links and differences between each.

Case Study Paper and Presentation: Students will write a paper about a case study that demonstrates how a situation was identified and how a solution was chosen to resolve the problem. The paper will include the problem, the treatment implemented, and the results.

Topical/Unit Outline:

Week	Topic	Readings	Assignments
1	Intro to Public Health Ethics	Chapter 1. Dawson & Verweij Kass, 2004	
2	Research Ethics -Medical Records -US vs. international	Kass NE, Natowicz MR, et al, 2003	IRB Tutorial
3	Community Based Research Ethics Diversity	Kennedy, et al, 2009 US DHHS, OMH, National Standards for Culturally and Linquistically Appropriate Services in	Reflection paper

		Health Care, 2007	
4	Journal Article discussions		Journal Article Critique
5	Population Level Bioethics	Chapter 5-Wikler & Brock in Dawson & Verweij	IRB Application Reflection paper
6	Parental Choice and Expert Knowledge Public Health recommendations or mandates	Chapter 6-Sorrell in Dawson & Verweij Beauchamp, T., 2006 Chapter 8- Hoven in Dawson & Verweij	Consent Form
7	Journal Article discussions		Midterm Exam
8	Ethical Issues in Public Health Genetics	Jennings, Module 8	Reflection paper
9	Ethical Issues in Environmental and Occupational Health	Jennings, Module 7	
10	Ethical Issues in Health Care Privacy and Health Care Reform	Jennings, Module 9	Reflection paper
11	Ethics in Publishing	Groves T, 2010 Hammond, et al 2009 Fanelli D, 2009	
12	Ethics in Teaching	Keith-Speigel, 2002	Case Study Paper Due
13	Ethics in Student Advising and Service		Reflection paper
14	Student Case Study Presentations		Case Study Presentation Due
15	Journal Article Discussions Review		Journal Article Review
	Final Exam		Final Exam

Policies:

Code of Student Responsibility:

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Academic Integrity:

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of academic materials, and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student's work is free from academic dishonesty of any type; and grades in this course therefore should be and will adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction in the course grade. In almost all cases the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office or http://legal.uncc.edu/policies/ps-105.html. Students are expected to report cases of academic dishonesty to the course's instructor.

Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

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Additional Readings:

Beauchamp, T. (2010). The concept of paternalism in biomedical ethics. In Beauchamp, T., *Standing on principles*. (pp. 101–119). New York: Oxford University Press.

Keith-Speigel P, Whitley BE, Balogh DW, Perkins DV, Wittig AF. (2002). The Ethics of Teaching: A Case Book, 2nd edition. Mahwah, NJ: Lawrence Erlbaum Associates.

Journal Articles and Govt Reports:

Kass, N. E. (2004). Public health ethics: from foundations and frameworks to justice and global public health. J Law Med Ethics. 2004; 32(2) 232-42, 190.

Kass NE, Natowicz MR, Hull SC, Faden RR, Plantinga L, Gostin LO, Slutsman J. The use of medical records in research: what do patients want? J Law Med Ethics. 2003 Fall;31(3):429-33.

Faden, R. R. (1987). Ethical issues in government sponsored public health campaigns. *Health Education & Behavior*, 14(1), 27–37.

Brock, D. W. (2002). Priority to the worse off in health-care resource prioritization. In *Medicine and Social Justice: Essays on the Distribution of Health Care*. (pp 362–372). New York: Oxford University Press.

Benatar, S. R. (2002). Reflections and recommendations on research ethics in developing countries. *Social Science & Medicine*, 54(7), 1131–1141.

Fanelli D.(2009) How many scientists fabricate and falsify research? A systematic review and meta-analysis of survey data. PLoS One. 2009 May 29;4(5):e5738. Review.

Groves T. (2010) What makes a high quality clinical research paper? Oral Diseases. 16, 313-315

Hammond D, Chaiton M, Lee A, Collishaw N. (2009) Destroyed documents: uncovering the science that Imperial Tobacco Canada sought to conceal. Canadian Medical Association Journal. 181(10:691-8.

Kennedy C, Vogel A, Goldberg-Freeman C, Kass N, Farfel M.Faculty perspectives on community-based research: "I see this still as a journey".J Empir Res Hum Res Ethics. 2009 Jun;4(2):3-16.

US DHHS, OMH, National Standards for Culturally and Linquistically Appropriate Services in Health Care, 2007

Newspaper articles:

Faden, R., & Karron, R. (2009). A moral obligation? Should the U.S. produce enough H1N1 flu vaccine to help developing countries?, *Baltimore Sun*. Aug. 17. [Available online]

University of North Carolina at Charlotte
College of Health and Human Services

Course Number: HLTH 8602

Course Title: Communicating and Disseminating Research

Course Credit and Clock Hours: 3 graduate credits

Pre-requisites and/or Co requisites: None

Faculty: TBD

Catalog Description: 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.

Course Objectives: This course meets the Ph.D. Core Competencies as outlined in the Student Manual. At the conclusion of this course students will be able to:

- Demonstrate expert knowledge of the research literature on a topic
- Work in collaborative multi disciplinary teams
- Communicate research findings in ways that lay people can understand
- Gain experience with different genres and forms of dissemination (e.g. dissertation, empirical article, conceptual analysis, press release)
- Write precisely and plainly for technical and general audiences
- Present oral research effectively in professional and public forums
- Understand characteristics of different audiences
- Present findings to community members that are culturally appropriate
- Recognize and implement effective communication tools for targeting diverse audiences

Syllabus Subject to Change: The instructor reserves the right to alter this syllabus based on best practices that fit changing circumstances.

Required Texts:

Beaudet C, Grant P, Starke-Meyerring D. (2008) Research Communication in the Social and Human Sciences: From Dissemination to Public Engagement. Cambridge Scholars Publishing.

Additional Readings:

Health Communication Insights: The Role of Communication in Peru's Fight Against Tuberculosis, 2004 --http://www.jhuccp.org/sites/all/files/HC%20Insigths-The%20Role%20of%20Communication%20in%20Peru%20fight%20against%20TB.pdf

Piotrow PT, Rimon JG II, Payne Merritt A & Saffitz G (2003). Advancing Health Communication: The PCS Experience in the Field. Center Publication 103. Baltimore: Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs. http://www.jhuccp.org/sites/all/files/Advancing%20Health%20Communication-The%20PCS%20Experience%20in%20the%20Field.pdf

Topical/Unit Outline:

Week	Activity/ Reading	Assignment
1	Introduction to NC CHAMPS Form into small groups (2-3 people each)	Identify a research question
2	Principals of manuscript development Literature synthesis expectations	
3	Work with group members on literature review	
4	Thinking through the methods section Determination of statistical analysis	Submit Draft 1
5	How to select a journal, format a manuscript, and present your data (table, graphs, etc.)	
6	Work on statistical analysis and manuscript draft	
7	How to review a manuscript Peer review of manuscript draft	Submit Draft 2
8	Work with peers and instructor on abstract, manuscript and journal selection	
9	Identification of professional organizations Principals of conference presentations: Poster and Oral Work with group members on poster	Submit Draft 3
10	Discuss the differences between presentations to professional vs. community groups Work with group members to compose two PowerPoint presentations: one for community and one for professional conference	
11	Present community focused PowerPoint presentation	Submit blinded final manuscript for internal review
12	Responding to reviewer comments Meet with instructor to plan manuscript revisions	Submit both PowerPoint presentations
13	Principles of conceptual analysis and press release	

	development Working with the media: Interviews (print, audio, and video)	
14	Peer review of press release Discussion of electronic research dissemination	Press release
15	Poster presentations and course wrap-up	Poster presentation; submit final manuscript for publication

Grades:

Graduate: 90-100 A, 80-89 B, 70-79 C, Below 70 U

Evaluation Methods:

Identify research question	10%
Draft 1 - Introduction Section	10%
Draft 2 – Methods & Results	10%
Draft 3 – full manuscript	15%
Finalized Manuscript	30%
PowerPoint Presentation	10%
Press Release	5
Poster Presentation	10%

Teaching Strategies – The focus of the course is working with students to use secondary data to develop a finished manuscript, 2 PowerPoint presentations, a press release, and a poster presentation. The majority of the class is experiential with mentored development of the final products. Students will work in small groups. The major product is a full-length publishable manuscript that will be blind-reviewed by department faculty. Students will then work with the instructor to address the reviewer comments before final submission to the target journal.

Manuscript Development:

1. Research Question – Using CHAMPS data identify a research question to address in your manuscript.

2. Draft 1 - Introduction section to your manuscript. The introductions should include why the problem is important, what is significant about your study, and a synthesis of the relevant literature.

3. Draft 2 – A revision of draft 1 plus the methods and results section.

4. Draft 3 – a complete manuscript with all sections.

5. Final manuscript – incorporating all revisions suggested by the instructor and/or justification for why those changes were not appropriate. This final

manuscript should be formatted according to the target journal guidelines. This manuscript will then be blind-reviewed by department faculty.

Power Point Presentation: Students will work with group members to compose two PowerPoint presentations based on their manuscript results: one for a community audience and one for a professional conference.

Press Release: Students will create a two-page press release, which will be presented to the class on the final day.

Poster Presentation: Students will create a poster and have it printed by the Health Informatics group that will be presented to the class on the final day.

University Policies:

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Religious Accommodation:
It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester http://legal.uncc.edu/policies/ps-134.html. The census date for each semester (typically the tenth day of instruction) can be found in UNC Charlotte's Academic Calendar (http://registrar.uncc.edu/calendars/calendar.htm).

University of North Carolina at Charlotte
College of Health and Human Services

Course Number: HLTH 8603

Course Title: Teaching Portfolio

Course Credit and Clock Hours: 3 credits, graduate

Pre-requisites and/or Co requisites: None.

Faculty: TBD

Catalog Description: HLTH 8603 (3 credits) 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.

Course Objectives: Upon completion of this course, students will be able to do the following: understand characteristics of different audiences; present oral research effectively in professional and public forums; present findings to community members that are culturally appropriate; and demonstrate teaching skills and experience. The course is designed to meet the Ph.D. Core Competencies as outlined in the Student Handbook.

Diversity Objective: Upon completion of this course, students will be able to demonstrate knowledge of how to respond to a diverse student body with respect to disabilities, race and ethnicity, gender, reentry status, and academic diversity.

Teaching Strategies:

You are expected to **attend and participate** in all class sessions. Please do your readings prior to class so you can be actively involved in all class sessions.

Also, keep in mind that as your professor, I do not "give" you grades. **You earn your grade.**

Required Text: Tools for Teaching by Barbara Gross Davis (First edition, Jossey-Bass Publishers, ISBN 1-55542-568-2)

Grades and Evaluation Methods:

Final grades for the course will be based on the following:

Microteaching	50 points
Creating an Assignment	50 points
Full Lecture	100 points
Reflective Pieces	50 points

CTL Workshop	25 points
Teaching Philosophy	25 points

Note: Students will be responsible for creating a mini-lecture on a topic of their choice for the microteaching assignments. Following this assignment, students will be paired with faculty members in the department and consult with them to create a 90-minute lecture to be delivered during the semester. Additionally, students will create an assignment related to their 90-minute lecture and grade this assignment according to a specified rubric (designed by the student) under the direction of their assigned faculty member. Students are also expected to attend one Center for Teaching and Learning (CTL) Workshop during the course of the semester and to write a Teaching Philosophy statement that would be suitable to include as part of an application for a faculty teaching position. Details related to these assignments will be discussed in greater detail throughout the semester.

Numerical scores will be converted to a letter grade in the following manner:

A	90-100
B	80-89.9
C	70-79.9
U	<70

Department or Course Policies:

Please be respectful of your fellow classmates and do not allow your phone to ring during class! If you are expecting an urgent call, please put your phone on "silent" or "meeting" mode so it does not disturb those around you and take the call outside of the classroom.

The standards and requirements set forth in this syllabus may be modified at any time during the semester. If it becomes necessary to make any changes, I will notify you during class.

The best way to contact me outside of the classroom is via email. If you email me during the week, I will respond to you within 24 hours. If you email me on the weekend or during a university break, it may take longer for me to answer your email.

Course Outline

WEEK	TOPIC	ASSIGNMENTS
1	Introductions, Syllabus, Expectations	
2	"Getting Under Way"	Read Chapter 1; reflective piece (Does the course syllabus contain all necessary items? What changes would you make to the syllabus?)
3	"Responding to a Diverse Student Body"	Read Chapter 2
4	"Discussion Strategies"	Read Chapter 3; reflective piece (What discussion strategies have been used in your classes at UNC Charlotte? What strategies were most/least effective?)

5	"Lecture Strategies"	Read Chapter 4; discuss microteaching assignment
6	"Collaborative and Experimental Strategies"	Read Chapter 5
7	Microteaching	During class—provide peer feedback re: microteaching sessions
8	Microteaching	During class—provide peer feedback re: microteaching sessions
9	"Enhancing Students' Learning and Motivation"	Read Chapter 6; reflective piece (What strategies did you see in use during the Microteaching sessions?); student/faculty member matching for 90-minute lecture
10	"Writing Skills and Homework Assignments"	Read Chapter 7
11	"Testing and Grading"	Read Chapter 8; turn in rough draft of homework assignment that accompanies 90-minute lecture
12	"Instructional Media and Technology"	Read Chapter 9; turn in scoring rubric for homework assignment that accompanies 90-minute lecture
13	"Evaluation to Improve Teaching"	Read Chapter 10; report on experiences during 90-minute lecture
14	"Teaching Outside the Classroom"	Read Chapter 11; report on experiences during 90-minute lecture
15	"Finishing Up"	Read Chapter 12; report on experiences during 90-minute lecture; teaching philosophy statements due

*Please note that the page numbers refer to readings in your text. Readings should be completed in preparation for the lecture.

**The final exam is scheduled for XX/XX/XXXX at YY:YY.

***In addition to reporting on your 90-minute lecture experience during class, you are also expected to turn in a reflective piece on this experience. This reflective piece is due one week after you complete your 90-minute lecture.

University Policies:

Code of Student Responsibility:

"The *UNC Charlotte Code of Student Responsibility* (the Code) sets forth certain rights and responsibilities in matters of student discipline. The Code defines these responsibilities and guarantees you certain rights that ensure your protection from unjust imposition of disciplinary penalties. You should familiarize yourself with the provisions and procedures of the Code" (Introductory statement from the UNC Charlotte brochure about the Code of Student Responsibility). The entire document may be found at this Internet address:
http://legal.uncc.edu/policies/ps-104.html

Academic Integrity:
Students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity. This code forbids cheating, fabrications, or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student's work is free from academic dishonesty of any type; and grades in this course therefore should be and will adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction in the course grade. In almost all cases the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office or http://legal.uncc.edu/policies/ps-105.html. Students are expected to report cases of academic dishonesty to the course's instructor.

Special Needs: If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at http://legal.uncc.edu/policies/ps-51.html. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

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

Date: _____

Constituent Institution: The University of North Carolina at Charlotte

CIP Discipline Specialty Title: Public Health Education and Promotion

CIP Discipline Specialty Number: 51.2207 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., PhD): PhD

Does the proposed program constitute a substantive change as defined by SACS? Yes__ No **x**

a) Is it at a more advanced level than those previously authorized? Yes__ No **x**

b) Is the proposed program in a new discipline division? Yes____ No **x**

Proposed date to establish degree program (allow at least 3-6 months for proposal review):
month **August** *year* **2013**

Do you plan to offer the proposed program away from campus *during the first year of operation*? Yes _____ No **x**

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

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 PhD in Public Health Sciences at UNC Charlotte. The considerable strengths of our department are evident to support the development of a rigorous PhD 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 PhD 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. We are further supported by the accreditation of our Master of Health Administration (MHA) program since 2007. Thus, the department has a demonstrated history of developing and delivering high quality graduate and undergraduate programs. This proposed PhD articulates with existing doctoral programs on campus - including the Health Services Research PhD and the Health Psychology PhD. Further, the PhD in Public Health Sciences will contribute to the University's importance as a Carnegie Foundation Community Engagement institution. The proposed PhD 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). More recently, the proposed PhD is a stated goal in the University's 2011-2016 Institutional Plan (UNC Charlotte, 2011). In particular, the PhD 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. The proposed PhD program will further anchor UNC Charlotte as a key research institution in western North Carolina, expanding UNC Charlotte's ability to address the increasing public health needs of our growing and dynamic state.

Nature and Scope

The PhD 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 PhD 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.

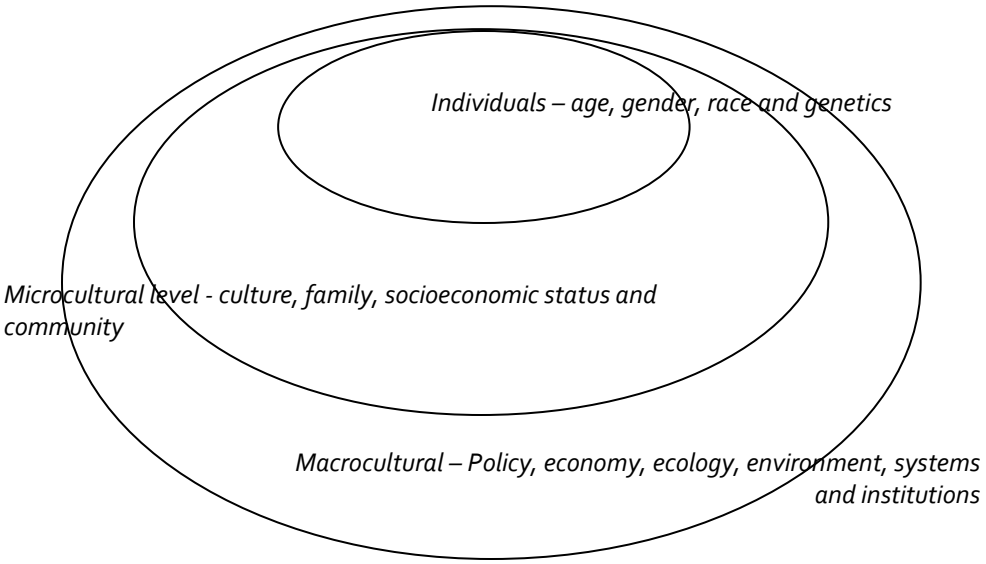
As one of the core areas of public health - the behavioral sciences - focus on understanding and influencing the social determinants that affect health behavior within populations, societies and communities. Medicine is concerned with individuals and uses a biomedical approach to heal patients who have 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).

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.

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



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-11-162, PAR-08-212, PA-10-027 – see Appendix A1 - NCI Measurement PA). 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 US 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, NC 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 PhD 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 (e.g. infrastructure, traffic patterns, parks and sidewalks); 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

More recently, NIH convened researchers to consider how to best advance the science of behavior change (National Institutes of Health, 2009). Several key themes were noted that relate directly to this PhD proposal, and that mesh with the strengths of the faculty members that will deliver the program. One theme was the need for "integrated multilevel approaches" that address individuals and the population, which integrate methodology, measurement and sampling. Another theme was the need to target multiple related behaviors such as chronic illness self-management behaviors. The need to consider a lifespan perspective with respect to behavior change was also noted. Further, the importance of the environmental context of behavior such as social networks was deemed important. NIH, through the OBSSR, reaffirms its 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/training_and_education/annual_Randomized_Clinical_Trials_course/RCT_info.aspx.

Intended Audience – The proposed PhD 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 (MSW, MSN, MHA, MSPH and the MS 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, Anthropology, Communication Studies, Gerontology, Philosophy, Economics, Public Administration, or master's students from the College of Computing and Informatics (e.g., PSM Bioinformatics students).

External to UNC Charlotte, regional schools also train potential students such as Appalachian State University, Clemson University and Wake Forest University. 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 and CaraMont Health. There is also a Veteran's hospital (Hefner VA Medical Center) located in Salisbury (40 miles away).

Our current program accreditation will also extend the reach of the proposed degree program outside of the regional area. Importantly, ***the PhD 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 PhD graduates will have already had opportunities to work with public health community partners, 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 PhD 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 PhD program (Drs. Harver, Piper, Portwood, and Warren-Findlow). Dr. Huber, Dr. J. Laditka, Dr. S. Laditka, Dr. Portwood, and Dr. Racine are all associated with the Public Policy PhD. Drs. Harver and Huber are also graduate faculty for the Biology PhD, and half the department either teaches or serves on dissertation committees for the Health Services Research PhD. 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 PhD in PHS and other PhD programs on the UNC Charlotte campus, is with the Health Services Research (HSR) PhD that is currently housed in the College of Health and Human Services. The HSR PhD 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 PhD is primarily on quantitative analysis of secondary data. A secondary relationship is between the PHS PhD and the Health Psychology PhD in the College of Liberal Arts and Sciences. The Health Psychology PhD 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 PhD 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 PhD in Public Health Sciences delivers instruction in qualitative techniques, which is currently not available in the other two doctoral programs.

1. **Courses:** The HSR PhD contains a series of courses related to quantitative methods that will also form the core quantitative methods courses in the PHS PhD. 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.

As an interdisciplinary degree, Health Psychology PhD 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).

2. **Faculty:** As described above, PHS department faculty already teach in the HSR PhD 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 PhD program (see Section IV.A).

3. **Facilities** – The PHS PhD 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.

II. JUSTIFICATION FOR THE PROGRAM—NARRATIVE STATEMENT

A. Describe the proposed program as it relates to:

1. the institutional mission and strategic plan

The proposed PhD is fully aligned with UNC Charlotte's institutional plans and priorities, 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.

As part of the UNC Charlotte's UNC Tomorrow plan, the department, the College, and the University has identified establishing an accredited School of Public Health (SPH) as a major strategic goal. 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 the broader social, environmental 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 engagement of the proposed School of Public Health.

The proposed PhD 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 processes, has enthusiastically supported this doctoral program (see Appendix A5 – PH Advisory Board Letter of Support and

additional support letters from community-based not-for-profit organizations, health departments and healthcare organizations).

2. Student demand

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) website now lists 48 accredited schools of public health (SPH) in the US, double the number from 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 more academically competitive. For example, applicants' combined verbal and quantitative GRE scores have increased by almost 100 points in just 2 years. An increasing number of our MSPH graduates go on to doctoral and clinical degree programs (see Appendix A6 MSPH Student Training & Publications).

3. **Societal need** (For graduate, first professional, and baccalaureate professional programs, cite manpower needs in North Carolina and elsewhere.)

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. Thus we will need more public health workers and importantly, qualified people to educate and train them.

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 can 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 in the behavioral sciences.

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 cannot afford to not establish this program if we are to have a healthy and productive work force for our state.

4. **Impact on existing undergraduate and/or graduate academic programs of your institution.** (e.g., Will the proposed program strengthen other programs? Will it stretch existing resources? How many of your programs at this level currently fail to meet Board of Governors' productivity criteria? Is there a danger of proliferation of low-productivity degree programs at the institution?)

It is our belief that this doctoral program will strengthen and complement the other doctoral programs on the UNC Charlotte campus by providing their students with public health-related electives at the doctoral level. UNC Charlotte does not have any doctoral programs that fail to meet the Board of Governors' productivity criteria. In fact, all doctoral programs are currently growing. We anticipate that this program will meet or exceed productivity criteria given the increasing interest in Public Health degrees (as evidenced by increased applications for both our BSPH and MSPH degrees), and the number of master's degree programs on campus and in the region that will be feeder programs into the PhD in PHS.

The PHS department cannot currently deliver the proposed PhD program with our existing faculty resources. While the curriculum is designed to maximize other available courses on campus, there will be substantial expectations for individual mentoring of doctoral students, comprehensive exam committees, and student dissertation committees. To meet some of those needs we have instituted a designation of *Doctoral Affiliate Faculty* for faculty members throughout UNC Charlotte who do not have a formal affiliation with the department (such as adjunct status) but who are interested in working with future doctoral students in our program (see Section IV.A). This affiliation status extends our faculty resources and offers students exposure to other perspectives and training. Further, our accreditation body requires us to maintain a specific faculty: student ratio (10:1 for graduate programs), thus we will need 3 additional faculty to sustain the strength of our existing accredited BSPH and MSPH public health programs (see Section IV.B). Although the faculty will need to intensify their research portfolios to help support student assistantships, we also will need institutional support for the students. 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 will also allow the department to rotate faculty resources so that all faculty members have the opportunity to teach in the PhD program, and it should reduce the need for faculty to teach undergraduate courses, or allow us to reduce the class size by offering more sections.

B. Discuss potential program duplication and program competitiveness.

1. Identify similar programs offered elsewhere in North Carolina. Indicate the location and distance from the proposing institution. Include a) public and b) private institutions of higher education.

North Carolina has 2 doctoral programs with related themes: the Dr.PH. in Community Health Education at UNC Greensboro (93 miles away) and the PhD in Health Behavior and Health Education at UNC Chapel Hill (150 miles). There are no similar public or private programs that are outside the UNC system.

2. Indicate how the proposed new degree program differs from other programs like it in the University. If the program duplicates other UNC programs, explain a) why is it necessary or justified and b) why demand (if limited) might not be met through a collaborative arrangement (perhaps using distance education) with another UNC institution. 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.

UNC Chapel Hill's PhD program in Health Behavior and Health Education (HBHE) is a full-time, 46 credit, post-master's degree. This PhD is a rigorous, well-established doctoral program within the Gillings School of Global Public Health. All enrolled students have an MPH or MSPH from an accredited school or program. Students also complete 730 practica hours that provide experiential research training and an optional teaching practicum. These practica hours 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. Average dissertation hours completed are 15-18. 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 health education and health behavior research with an emphasis on theory application. The program focuses on 4 competencies: theoretical foundations, quantitative methods, intervention research, and professional development.

The proposed PhD has content overlap with HBHE, but delivers more of the professional development content through academic course work. The proposed program emphasizes theory development and advancement with a required qualitative methods sequence of courses. There is also particular attention to concept measurement and scale development. Our students will complete 45 credits, post-master's plus 18 dissertation research hours (required by the

Graduate School; 63 total semester credit hours). Within the 45 credits, our students take a 3-course (9 credits total) sequence of professional development courses to explicitly teach them the required skills for an academic career (teaching, writing and research) in a structured, supervised setting. Practical experience working with community agencies on research projects is incorporated into the two course qualitative methods sequence (HLTH 8121 and HLTH8122).

UNC Greensboro (UNCG) offers a DrPH in Community Health Education. The UNCG DrPH degree is a 63 credit hour, post-master's program. UNCG focuses on training students to conduct translational research to bridge the research to practice gap. The focus is on examining applied research questions related to the broader health determinants that influence health disparities, issues in health policy, and development of cutting-edge interventions at all levels of the social-ecological model. Training is delivered by having students and faculty work intensively with community-based partners in research teams. This research and instructional approach facilitates the rapid translation of new knowledge into the practice arena. The goal is to graduate students prepared for research careers in academia and research and practice venues.

For an additional comparison, we examined PhD programs in the southeast region with similar content to evaluate the consistency of the curriculum balance (underlined schools indicated CEPH-accredited schools or programs). The 8 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. Our curriculum is consistent with other schools in terms of the proportion of methods courses, behavioral courses and specialized concentration credits.

The proposed PhD, 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 PhD in PHS, with a concentration in behavioral science contains a strong research basis as it relates to development and validation of 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. Further, our curriculum contains specific courses to train doctoral students on those skills that they will need to be successful in an academic environment: teaching; conducting, publishing, and disseminating research; and promoting ethical conduct in an academic and research environment. The proposed curriculum is based on a competency model designed to train academics for behavioral science research. The competency model will aid us in obtaining accreditation in a timely manner.

Finally, we are 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.

It should be noted that within UNC Charlotte, there are 2 other health-related doctoral degrees: the interdisciplinary Health Psychology PhD located in the College of Liberal Arts and Sciences and the Health Services Research PhD housed in the College of Health and Human Services. While health psychology, health services research and public health all focus on health outcomes, they do so using different perspectives, in different settings, and at different levels. For example, the Health Psychology PhD focuses on individuals' cognitive and physiological processes that can influence health outcomes and health behaviors. Health Services Research doctoral students examine structural characteristics related to the health care delivery system and their association with individual health outcomes primarily using secondary data. Steeped in the social-ecological model, the proposed PhD in Public Health Sciences focuses on improving the *population's* health through evidence-based, primary and secondary prevention of disease in a variety of community settings. The PhD in Public Health Sciences utilizes wide-ranging theories and determinants associated with the broader societal and environmental levels of the social ecological model. These 3 degrees form a complementary portfolio of doctoral health training opportunities.

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

Headcount enrollment

Show a five-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: PhD in Health Behavior and Health Education

	2007-08	2008-09	2009-10	2010-11	2011-12
Enrollment	44	37	37	43	52
Degrees-awarded	6	11	9	2	6*

*expected

Institution: University of North Carolina – Greensboro†
Program Title: DrPH in Community Health Education

	2007-08	2008-09	2009-10	2010-11	2011-12
Enrollment	10	14	20	20	17

Degrees-awarded	-	-	4	5	-

†UNC Greensboro DrPH 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 used UNC Greensboro's projections as a guide for what our growth would most likely replicate. We also consulted other recently established doctoral programs on the UNC Charlotte campus as to their experiences with admissions, enrollment, funding levels, mentoring, and faculty resources.

The chart below projects our enrollment in the proposed program for four years and explains the basis for the projections:

	Year 1 2013-14	Year 2 2014-15	Year 3 2015-16	Year 4 2016-17
Full-time	5	11	18	21
Part-time	0	0	0	0
TOTALS	5	11	18	21

Please indicate the anticipated steady-state headcount enrollment after four years:
Full-time ____21_____ Part-time ____0_____ Total ___21_____

Semester credit hours (SCH) are based on the following assumptions:

1. We have assumed that all students are full-time.

Year 1: Full-time students will complete 18 hours/AY.

Year 2: Full-time students will complete 18 hours/AY.

Year 3: Full-time students will complete 18 hours/AY.

Year 4: 21 Full-time students will complete 18 hours/AY.
5 Full-time students will complete 9 hours/AY.

Year 1	**Student Credit Hours**		
Program Category	**UG**	**Masters**	**Doctoral**
Category I			
Category II			
Category III			90
Category IV			

Year 2	Student Credit Hours		
Program Category	**UG**	**Masters**	**Doctoral**
Category I			
Category II			
Category III			198
Category IV			

Year 3	Student Credit Hours		
Program Category	**UG**	**Masters**	**Doctoral**
Category I			
Category II			
Category III			324
Category IV			

Year 4	Student Credit Hours		
Program Category	**UG**	**Masters**	**Doctoral**
Category I			
Category II			
Category III			423
Category IV			

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 (PhD) 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 – PhD in Behavioral Sciences and Health Education
   - Johns Hopkins, Bloomberg School of Public Health – PhD in Social and Behavioral Sciences
   - University of California Los Angeles, School of Public Health – PhD in Community Health Sciences
   - University of Iowa, College of Public Health – PhD in Community and Behavioral Health
   - University of Michigan, School of Public Health – PhD in Health Behavior and Health Education
   - University of North Carolina at Chapel Hill, Gillings School of Global Public Health – PhD in Health Behavior and Health Education

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 PhD in Public Health Sciences, we consulted with multiple constituents on and off campus. Within UNC Charlotte we met with several Directors of related PhD programs (including intradepartment and interdisciplinary 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 PhD (Drs. Robert Lawrence, Marcia Ory and Bernard Turnock). We also consulted our Community Public Health Advisory Board for their 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 2009-2010 we submitted 16 proposals requesting $10.9 million. In AY2010-2011, we submitted over $11 million of grant and

contract proposals. 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 health-related grant proposals. Further, the department has established an ad hoc grant review committee of 3 senior faculty with grant funding histories to help faculty colleagues develop grant ideas and review grant submissions. In May 2011, we met as a department to establish research teams comprised of junior and senior faculty members. These teams emerged from a discussion of faculty members' research interests and skill sets. Each team was charged with planning a grant funding proposal during the Fall 2011 semester.

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 PhD 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 PhD 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 5 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 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 structured interview with a Program faculty member.

C. Degree Requirements. List the following:

1. **Total hours required.**

   63 post-master's, semester credit hours

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

   100 percent

3. **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 or N in any graduate course, enrollment will be terminated.

4. **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 PhD program limits master's level transfer credits to at most 6 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 PhD Program Director, in conjunction with Program Faculty, approves graduate level transfer credits. Students must apply for transfer of graduate levels courses within the first year of enrollment, or within one semester following completion of the course if taken during the PhD 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 PhD 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.

5. **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.

6. **Language and/or research requirements.**

    There is no foreign language requirement.

7. **Any time limits for completion.**
    - Students must pass all sections of the comprehensive exam within 1 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 6 months of passing the comprehensive exam.
    - Students must pass their dissertation defense within 5 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 8 years of first registering as a doctoral student.

D. 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 HSR program that will be cross-listed. Required courses 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 8272/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 PhD in Health Services Research or the PhD 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*)

***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 PhD in Public Health Sciences program and permission of instructor. Offered on a pass/fail basis only. (*on demand*)

***HLTH 8901. 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. (*Fall, Spring, Summer*)

IV. Faculty

A. List the names of persons now on the faculty who will be directly involved in the proposed program. 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 for graduate programs. The official roster forms approved by SACS can be submitted rather than actual faculty vita.

Program Faculty for the PhD 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 followed by their biosketches.

Arrigo, Bruce, PhD Criminal Justice and Criminology
Arif, Ahmed, PhD Public Health Sciences
Bosley, Deborah S., DA English
Brandon, Bill, PhD Public Policy
Harver, Andrew, PhD Public Health Sciences
Huber, Larissa Brunner, PhD Public Health Sciences
Laditka, James, PhD, DA Public Health Sciences
Laditka, Sarah, PhD Public Health Sciences
Piper, Crystal, PhD Public Health Sciences
Platonova, Elena, PhD Public Health Sciences
Portwood, Sharon, PhD Institute for Social Capital

Racine, Elizabeth, DrPH Public Health Sciences
Scheid, Teresa, PhD Sociology
Studnicki, James, PhD Public Health Sciences
Tong, Rosemarie, PhD Philosophy
Troyer, Jennifer, PhD Economics
Thompson, Michael, DrPH Public Health Sciences
Warren-Findlow, Jan, PhD 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, PhD, RN, FAAN Nursing
Suzanne Boyd, PhD Social Work
Maren Coffman, PhD Nursing
Judy Cornelius, PhD Nursing
Boyd Davis, PhD Applied Linguistics/English
Christine S. Davis, PhD Communication Studies
Virginia Gil-Rivas, PhD Psychology
Shanti Kulkarni, PhD Social Work
Ross Meentemeyer, PhD Geography
Amy Peterman, PhD Psychology
Maggie Quinlan, PhD Communication Studies
Dena Shenk, PhD Anthropology/Gerontology
Laura Talbot, PhD, Ed.D., RN, GCNS-BC, Nursing
Lori Thomas, PhD Social Work
Meredith Troutman, PhD Nursing
Lisa Rashotte Walker, PhD Sociology
Jennifer Webb, PhD Psychology

B. 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 three new faculty positions for the PhD in Public Health Sciences during the first 2 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 PhD Program, the number of existing faculty qualified and available to teach these courses, and the need for additional expertise in the program.

Administrative needs: The PhD program will require a 12 month administrator to oversee recruitment, scheduling, advising, implementation and progress. This

individual will carry a half-time teaching load (1 course per semester – fall, spring and summer).

Number of courses required: 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), a total of approximately 1.5 FTE's (full-time faculty equivalent) are needed to cover the Program in the first year and another 1 FTE is needed in the second year of the program.

Expertise needed by new faculty: It is assumed that most PHS faculty members will teach in the PhD program on a part-time rather than a full-time basis. It is also 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 also cover existing master's and baccalaureate course offerings. It is also based on the need for additional expertise in the PhD 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, biostatistics and epidemiology. Preference will be given to new faculty hires having the above types of expertise.

C. If the employment of new faculty requires additional funds, please explain the source of funding.

Financing to support the proposed PhD program is expected to come from three sources: state funds for enrollment growth; continued use and reallocation of existing resources; and new external grant and contract funding.

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).

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 this service level as we deepen our community engagement to extend opportunities to doctoral students. There will also be increased department service as faculty will serve on the PhD 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.

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 members 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 PhD 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 PhD 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.

PHS faculty, students and staff are supported by the Health Informatics group who maintain the CHHS computing and instructional environment. The college includes a student computing lab with 50 computers, and 3 computer classrooms with ≈ 25 computers in each room, group study rooms, and a video-teleconferencing classroom.

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. **Discuss any information technology services needed and/or available.**

We consulted with the CHHS Health Informatics group that supports the computing and technical environment for the college and the department. Their estimates for hardware and software needs of the proposed program are included in the Budget.

D. Discuss sources of financial support for any new facilities and equipment.

No financial support is needed for facilities at this time.

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 PhD 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 PhD 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 PhD 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 PhD 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 PhD 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.A).

D. PHS PhD Program Advisory Committee

The PhD 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 PhD 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 PhD 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 PhD Program Advisory Committee:

- Serves as the Curriculum Committee for the PhD 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

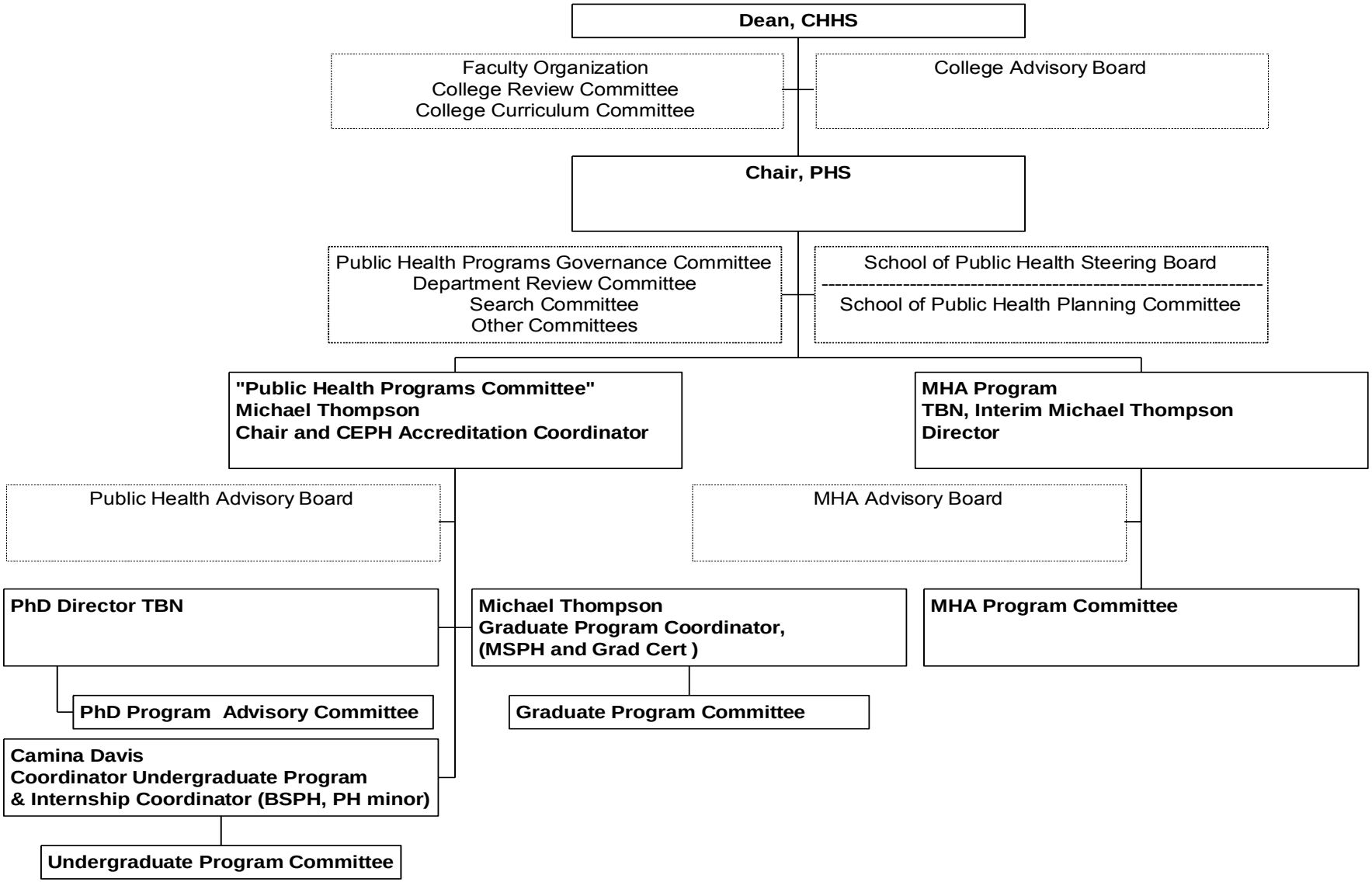
After the initial appointment by the PHS Department Chair, all future members of the Program Advisory Committee (with the exception of the Program Director who is appointed by the Chair) will be elected by the PHS PhD Program Faculty.

E. The PhD 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 PhD Program Advisory Committee – including the Program Director - must be from among eligible Program or Doctoral Affiliate Faculty. The Director of the PHS PhD Program will maintain a list of program and doctoral affiliate faculty.

Figure 1. Organization Chart of Department of Public Health Sciences.



VIII. ACCREDITATION

Indicate the names of all accrediting agencies normally concerned with programs similar to the one proposed. Describe plans to request professional accreditation. If the proposed new degree program is at a more advanced level than those previously authorized or if it is in a new discipline division, was SACS notified of a potential "substantive change" during the planning process? If so, describe the response from SACS and the steps that have been taken to date with reference to the applicable procedure.

All public health degree programs within the Department are guided by criteria established by the Council for Education in Public Health (CEPH). The curriculum for the proposed PhD 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 PhD in Public Health Sciences has been specifically and strategically designed from its inception to meet CEPH criteria for doctoral degree programs.*** The PhD can be submitted for accreditation under our existing accreditation award once there are graduates from the program.

No notification or change to SACS accreditation was required.

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, educational leadership, geography, kinesiology, 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.

X. ADDITIONAL INFORMATION

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

XI. BUDGET

Provide estimates (using the attached form) of the additional costs required to implement the program and identify the proposed sources of the additional required funds. *Use SCH projections*

(section II.C.) to estimate new state appropriations through enrollment increase funds. Prepare a budget schedule for each of the first three years of the program, indicating the account number and name for all additional amounts required. Identify EPA and SPA positions immediately below the account listing. New SPA positions should be listed at the first step in the salary range using the SPA classification rates currently in effect. Identify any larger or specialized equipment and any unusual supplies requirements.

For the purposes of the second and third year estimates, project faculty and SPA position rates and fringe benefits rates at first year levels. Include the continuation of previous year(s) costs in second and third year estimates.

Additional state-appropriated funds for new programs may be limited. Except in exceptional circumstances, institutions should request such funds for no more than three years (e.g., for start-up equipment, new faculty positions, etc.), at which time enrollment increase funds should be adequate to support the new program. Therefore it will be assumed that requests (in the "New Allocations" column of the following worksheet) are for one, two, or three years unless the institution indicates a continuing need and attaches a compelling justification. However, funds for new programs are more likely to be allocated for limited periods of time.

See Appendix A10 for budget estimates for years 1-3 of the proposed doctoral program.

XII. EVALUATION PLANS

All new degree program proposals must include an evaluation plan which includes: (a) the criteria to be used to evaluate the quality and effectiveness of the program, (b) measures to be used to evaluate the program), (c) expected levels of productivity of the proposed program for the first four years of operation (number of graduates), (d) the names, addresses, e-mail addresses, and telephone numbers of at least three persons (six reviewers are needed for graduate programs) qualified to review this proposal and to evaluate the program once operational, and (e) the plan and schedule to evaluate the proposed new degree program prior to the completion of its fifth year of operation once fully established.

PROGRAM EVALUATION FORMAT

A. Criteria to be used to evaluate the proposed program:

Evaluation of the PhD 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.

Specific criteria will include:

- Admissions information: number of applicants, number admitted, and number enrolled
- Quality of applicants based on GPA and GRE scores
- Retention rates – either at or above UNC Charlotte Graduate School average
- Graduation rates – CEPH mandates 80% graduation rates
- Employment rates
- Levels of external funding to support student research

B. Measures to be used to evaluate the program:

In addition to the above criteria, the primary measures used to evaluate the program are based on student achievement of the proposed competencies (see Appendix A11). Measures related to:

- Pass rates on comprehensive exams
- Pass rates on dissertation proposal defenses
- Pass rates on dissertation defenses
- Percentage of students who graduate
- Dissemination of student research – student-authored presentations and publications
- Levels of student service to the community

C. Projected productivity levels (number of graduates):

Level	Year 1	Year 2	Year 3	Year 4	TOTALS
B	_____	_____	_____	_____	_____
M	_____	_____	_____	_____	_____
I/P	_____	_____	_____	_____	_____
D	__0__	__0__	__0__	__5__	___5_____

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

D. Recommended consultant/reviewers: Names, titles, addresses, e-mail addresses, and telephone numbers. May not be employees of the University of North Carolina.

1. Robert S. Lawrence, M.D., Bloomberg School of Public Health, Johns Hopkins University
2. Maria Ory, Ph.D, MPH, Texas A&M School of Rural Public Health
3. Bernard J. Turnock, M.D., MPH, School of Public Health, the University of Illinois at Chicago

E. Plan for evaluation prior to fifth 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 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 those students graduating, exit surveys will also be used to assess overall feedback on the doctoral curriculum and process.

XIII. REPORTING REQUIREMENTS

Institutions will be expected to report on program productivity after one year and three years of operation. This information will be solicited as a part of the biennial long-range planning revision.

Proposed date of initiation of proposed degree program: _____

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

Chancellor: _____

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A Vision for Doctoral Research Training in Health Behavior: A Position Paper from the American Academy of Health Behavior

American Academy of Health Behavior Work Group on Doctoral Research Training[a]

***Objective*: To establish and disseminate the position of the American Academy of Health Behavior (The Academy) on doctoral research training. *Methods*: A collaborative process involving the Work Group on Doctoral Research Training with input from The Academy membership led to the development of the guidelines described herein. *Results*: A set of guidelines is provided that describe the process of learning to be a scholar/researcher and the outcomes of learning the practice of health behavior research. *Conclusions*: The doctoral students who are to become the stewards of our field should be prepared to engage in scholarship that creates new knowledge, uses research to transform practice, and effectively communicates research findings.**

***Key words*: doctoral education, research training**

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The Woodrow Wilson National Fellowship Foundation[1] notes that complacency seems to characterize current views on doctoral education in the United States. Echoing this theme, the Carnegie Foundation for the Advancement of Teaching[2] has called for a revitalization of doctoral education. One problem facing many disciplines, including the health behavior field, is the lack of guidelines for insuring that doctoral students receive strong training in the crucial elements of scholarly inquiry and the practice of research.[3] To prepare doctoral students to be scholars capable of generating new knowledge, and to expand the research base of the health behavior field, investments must be made in doctoral research training.

In this paper, The Academy offers a vision for doctoral research training to which we hope the discipline will aspire in the coming years. Part I describes the *process* of learning to be a scholar/researcher in the health behavior field, including the learning conditions, opportunities, and resources needed to provide excellent research training at the doctoral level. Part II identifies the *outcomes* of learning the practice of health behavior research.

The paper is intended to establish a conceptual foundation for the discussion of critical issues on this subject. It represents a starting point, not the last word, on a set of problems that has beleaguered many disciplines in recent years.[4] We do not expect that all disciplines involved in health behavior research will achieve consensus on all of the positions taken by The Academy in this paper. We do hope the work stimulates critical discussion about the quality of training currently being provided to prepare doctoral students to engage in significant scholarly

a The Academy Work Group was Chaired by Dennis L. Thombs. The group is listed in alphabetical order in Appendix A.

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inquiry and research.

Health behavior researchers come from a variety of disciplines, including but not limited to health education and health promotion, nursing, psychology, anthropology, sociology, social work, and medicine. The standards and mechanisms of doctoral education vary across these disciplines. The focus of this paper, and the examples used, are concerned primarily with training health behavior researchers, not students in disciplines that may have only a collateral interest in human health. Furthermore, the intention of The Academy is not to explain how the guidelines described herein should be implemented by academic programs. Therefore, the paper offers no recommendations for an interdisciplinary implementation of doctoral training. However, we recognize that many of these recommendations are sufficiently broad and extend beyond our field, and thus may be applied to other disciplines.

METHOD

As the chair of The Academy's Professional Development Council, Dennis L. Thombs led the collaborative effort to create this paper. The inspiration to develop it can be traced to informal discussions that occurred among attendees at the First Scientific Meeting (2000) of The Academy in Santa Fe, NM. In 2002, calls were made to the membership of The Academy to create the Work Group on Doctoral Research Training. Following several solicitations for participation in the initiative, a series of early drafts of recommendations was circulated among the membership. At the Third (2003) and Fourth (2004) Scientific Meetings of the Academy, colloquia were held to recruit additional members for the Work Group and to discuss the development of a set of guidelines for doctoral research training. The 9 original members of the Work Group published an editorial in the *American Journal of Health Behavior* to announce the initiative and to garner further support for it.[5] In addition, the Work Group's progress was discussed at several Academy Board of Directors meetings. By 2004, more than a dozen members of The Academy were actively involved in preparing different sections of this paper and providing critical reviews of the contributions of other Work Group members.

PART 1

The Processs of Learning to Be a Scholar/Researcher: Core Values in Doctoral Research Training

Values play a significant role in guiding all human behavior. One type or set of values is *core values*. Core values are shared values or beliefs held by a collective body or group about certain endeavors, actions, or behaviors relative to the collective values or beliefs of the entire body or group. These values are important for groups as well as individuals for making decisions about the appropriateness or inappropriateness of engaging in certain decisions or behaviors. In doctoral research training programs, it is important that core values be made explicit to aid in their mutual understanding by both students and faculty. The identified core values have been annotated from a variety of sources and are endorsed by The Academy.[6-13]

(A) Research or discovery is a priority. Learning and engagement are important higher education missions, but they are subservient to discovery as a means for enhancing the health of the population. In doctoral-level research training programs, generating new knowledge is a professional obligation and responsibility.

(B) Research should be conducted for the sake of discovery. The work should be free of hidden agendas. Researchers must be aware of their biases and communicate them openly when discussing their research.

(C) Research excellence is "the" standard. Research training programs must pursue and be committed to research excellence. Priority is given to conducting systematic studies that are credible (internal validity), transferable (external validity), dependable (reliability), and confirmable (neutrality).

(D) Ethical conduct and research integrity are requirements. Students are to be given opportunities to evaluate the risks and benefits of research participation critically and will be able to identify appropriate human subject protections. All research involving human participants are conducted in accordance with human subject requirements and carried out under approved research protocols. Research is conducted with respect for human decency; rights to privacy; informed consent; and personal safety, confidentiality, and well-being of and com-

mitment to study participants. Faculty and students must forthrightly share and disclose relationships that may be advantageous or may lead to biased reporting or the perception of bias, and they must conduct interpersonal and interdisciplinary relationships in a professional manner.

(E) Research should focus on pressing problems of public health significance. Mentored research experiences should concentrate on investigating and solving critical problems important to improving society. Research pursuits of faculty and students should be aligned with the 10 leading health indicators identified in *Healthy People 2010*: injury and violence, physical activity, overweight and obesity, tobacco use, substance use, responsible sexual behavior, mental health, environmental quality, immunization, and access to care.[14]

(F) Research training should stimulate creativity and innovation. State-of-the-art methods should be a primary training focus. There also is a need for creative conceptualization of the causal and mediating processes that might be used to explain a gap in knowledge.

(G) Altruism is necessary for creating a community of scholars to support a research training program. For the good of science, scholars should forego personal goals when consulting with colleagues, mentoring, reviewing manuscripts for publication, and conducting research.

(H) Effective research training relies on mentorship. Mentorship is prized and accepted as a faculty responsibility as well as an opportunity to endorse research core values and guiding principles.

(I) Adherence to publication conventions is important. Use and endorse the IMRAD format of Introduction, Method, Results, and Discussion and multiple subheadings. Retention and protection of reviewers' confidentiality are expected and submission of manuscripts and reviewers' comments are confidential. Manuscripts should be published in peer-reviewed journals before receiving media coverage.

(J) Studies that support the null hypothesis or report negative findings should be viewed as making a potential contribution to the knowledge base. Studies that support the null hypothesis should be valued and published in peer-reviewed journals. These reports should be published in a timely manner.

Establishing a Research Culture

The recruitment of prospective doctoral students and the orientation of new doctoral students should emphasize that research involvement is an expectation and a primary feature of doctoral study.[2] Doctoral students should be encouraged to believe that they have an obligation, both to their institution and to their discipline, to create new knowledge as well as to disseminate it through publication, teaching, mentoring, public speaking opportunities, and other venues. Most important, research and teaching should be viewed as complementary forms of scholarship, rather than conflicting ones. Research can enhance the teaching and learning experience in the classroom through the sharing of new theories and advanced knowledge. Moreover, teaching and practice can help generate and test new research questions.

Establishing and maintaining a research culture requires faculty and student collaboration in a number of scholarly activities. A substantial and varied body of faculty research is needed to support a doctoral program, ie, a sufficient faculty capacity for significant research activity. Funded research activity is particularly important because of the opportunities it creates to support doctoral students. In addition, there is a need for graduate faculty who can provide high-quality research coursework designed specifically for the preparation of health behavior investigators. The rich research content and methodological issues to be garnered from the field of education and the fertile disciplines encompassing the social and behavioral sciences notwithstanding, coursework should place heavy emphasis on examples from health behavior research. Thus, the professional preparation of health behavior researchers should focus on injury and violence prevention, tobacco control, physical inactivity, high-risk sexual behavior, and other national health priorities (see *Healthy People 2010*[14]). Furthermore, departmental colloquia, involving students, should be held on a regular basis to discuss research problems and findings.

A Research Apprenticeship

The mastery of research tools will re-

quire the doctoral student to work with faculty members, as an apprentice, on research projects and other scholarly work. In this capacity, doctoral students should be expected to have coauthored data based publications before graduation (or at least have papers accepted for publication). It should be recognized that many research tools will not be mastered as a result of classroom learning. There is a long and steep "learning curve" for competence in research. Thus, doctoral students should be engaged in research at the beginning of their program of study, and they should be exposed to the entire research process, including the proposal and budget development of grant applications. The dissertation project should not be the student's first and only research experience in a doctoral program.

Compared to baccalaureate and master's level education, doctoral study should be a highly concentrated learning experience. The student should expect to be immersed in the discipline. In most circumstances, full-time employment of the doctoral student during this period of time should be considered unrealistic by both the student and the faculty.

The Qualifying or Comprehensive Examination

Doctoral preparation in the basic theory and research methods of our field typically begins in foundation coursework, where students are exposed to national health priorities (injury prevention, HIV/AIDS prevention, etc), the seminal research studies, major theories, conceptual models and classic research methods in the field. Beyond the individual course level where students demonstrate their mastery of the material of each course's subject matter, there also is a need for a formal mechanism that tests the student's ability to synthesize a body of research and apply theory toward a science of evidence-based practice. Within the evaluation parameters of a single course, it may be adequate for students to demonstrate their knowledge of theories. However, to engage in the types of scholarship expected in the profession, doctoral students must be able to apply theories and concepts to researchable questions.

Research in the health behavior field is decidedly applied in nature, and therefore, the involved disciplines need to produce professionals who can function effectively in this arena. Although doctoral students will acquire research tools through coursework, many practical research skills can be learned by working with faculty and more experienced students on research projects, and through other experiential features of their graduate program. Thus, the qualifying or comprehensive examination represents an important evaluation milestone for assessing a doctoral student's potential for engaging in the scholarship of discovery, integration, and application, as described by Boyer.[15] This examination typically occurs prior to the dissertation and is the benchmark used to determine the doctoral student's advancement to candidacy. That is, the student is no longer a doctoral student, but a doctoral candidate, and is qualified to begin significant research – the dissertation – under the supervision of a faculty advisor.

Some doctoral programs will require students to sit for this exam relatively late in their program, after all coursework has been completed and the only requirement to complete is the dissertation. This approach assesses students' ability to engage in advanced forms of scholarship after they have been exposed to all the formal and informal elements of their training. Other doctoral programs will require students to sit for this exam relatively early in their program, that is, after their basic or foundation course work has been completed, but before they take more advanced and specialized coursework. The aim of this approach is to identify any deficiencies early in their training so that corrective actions can be taken.

Regardless of when in a student's program the qualifying or comprehensive examination occurs, 2 overarching principles should guide development of the examination. First, the examination should be a test of synthesis of knowledge and experiences, not a reiteration of previously tested material. Second, the examination should provide an opportunity for students to demonstrate that they possess the potential for producing meaningful scholarship in the health behavior research arena. With respect to research competencies, the qualifying or comprehensive examination should specifically test whether a doctoral student can integrate the application of a theoretical or conceptual framework with a research

design to address a gap in the knowledge base. There is a professional responsibility to ensure that future researchers have the capacity to engage in policy-relevant, evidence-based evaluation of health promotion programs. The qualifying or comprehensive examination should be viewed as one evaluation milestone for assessing the research competence of a doctoral student.

The Purpose of the Dissertation

The doctoral degree is a research degree with the essential goal of preparing researchers and scholars. The doctoral dissertation should document, and the oral defense should demonstrate, the doctoral student's ability to research a problem independently with a high level of competence and make an original contribution to knowledge.[16] In most cases, the process and outcomes of the research should represent the "scholarship of discovery," as described by Boyer.[15]

Some doctoral programs attempt to assess research competence through a series of smaller projects instead of one large doctoral dissertation. Such alternative methods of evaluating research competencies include papers published in refereed journals and edited volumes. Nevertheless, The Academy agrees with the majority of graduate program faculty members that the dissertation plays an indispensable role in the metamorphosis of student to scholar.[17]

Boyer,[15] in *Scholarship Reconsidered,* argues that every scholar must demonstrate the capacity to do original research and to present the results to colleagues. This set of tasks is accomplished through examinations, completion of a dissertation, and oral defense of a dissertation. There is some disagreement about the necessity of the oral defense. Nobel,[18] for example, has recommended that the oral defense of the dissertation be abolished as a requirement for a doctorate as it represents what the candidate has already written. Furthermore, he argues, it can be a disastrous experience for a doctoral candidate when examiners try to demonstrate their brilliance in finding fault in the dissertation.

The Academy believes that doctoral programs should require an oral defense of the dissertation. During the defense, questions are asked of the candidate. The defense is the time the candidates must be able to demonstrate their knowledge of related literature and competence in understanding of theories related to the research, how the data were analyzed, and weaknesses in the study.

Successful defense of a dissertation should be considered the passage through which a doctoral student demonstrates competency in conducting original research and gains entry into the community of scholars. Failing a defense is unusual, as most doctoral committees will not permit the candidate to advance to this stage if there is a serious problem with the research. Nevertheless, it is quite appropriate for the doctoral committee to require revisions to enhance the quality of the dissertation and the learning experience. Furthermore, the oral defense should help prepare the candidate to present and defend the research to larger audiences of their professional colleagues and well-known researchers in health behavior and, also, to external audiences, such as the media.

Boyer[15] discusses how graduate study tends to become increasingly narrow, culminating in a focused dissertation topic. He encourages scholarly breadth and integration of knowledge by inviting representatives of related disciplines to read the dissertation and participate in the oral defense. During such an oral defense, candidates should not only demonstrate that they can discover, but also integrate, apply and communicate knowledge.

The Contribution of the Dissertation

Dissertation research should make a meaningful contribution to the professional literature. As Boyer[15] notes, some dimensions of scholarship are universal. To demonstrate one's capacity to do original research, one studies a serious intellectual problem and presents the results to colleagues. This is the purpose of a dissertation, or a comparable piece of creative work. Hawley[17] also states that the dissertation not only is a "rite of passage into the world of scholarship," but also can be "a gold mine of researchable questions" for future studies. Hawley[17] continues: "From modest beginnings, some scholars spend years developing and refining their original topics and eventually become recognized authorities in the subject matter of their dissertations."

The major purpose of the dissertation is to provide the student with an educa-

tional experience, which results in a significant contribution to the field of health behavior. A meaningful dissertation is one that contributes to the theoretical, conceptual, empirical, or knowledge and practice base of health behavior. The doctoral dissertation should include a study or analysis of a contemporary public heath problem or issue relevant to health behavior, and it should be grounded in social and behavioral science theory. The doctoral candidate should conduct original research that draws on a theoretical or conceptual framework to articulate and organize hypothesized relationships among factors that either contribute to the etiology of a health problem or phenomenon or test an intervention designed to address a health problem.

Dissertation research should do more than simply determine the extent to which measures representing one set of theoretical constructs correlate with a measure of health behavior. The dissertation project should be a rigorous *test* of a theory or theories.

Not only should the dissertation topic be of public health significance, but the research also should help fill an important gap in knowledge. Although there is a need to use existing knowledge and information better, there also is a need for new knowledge, for work on that which academics refer to as "the cutting edge of knowledge." As Boyer[15] noted, "the work of a scholar also means stepping back from one's investigation, looking for connections, building bridges between theory and practice, and communicating one's knowledge effectively to others" (p. 16). Oscar Handlin observed, our troubled planet "can no longer afford the luxury of pursuits confined to an ivory tower… scholarship has to prove its worth not on its own terms but by the service to the nation and the world" (cf. Boyer,[15] p. 23).

Boyer[15] also believes that what we urgently need today is a more inclusive view of what it means to be a scholar: "a recognition that knowledge is acquired through research, through synthesis, theory practice, and through teaching" (p. 24). Thus, although doctoral students should continue to pursue a specialized field of study and do original research, students also should be encouraged to work across the specialties, taking courses in other disciplines to gain a broader perspective.

Clearly, one's research findings are of little value until they are disseminated to appropriate audiences. The Academy believes that publication of the dissertation research in a peer-reviewed publication should be an expectation of doctoral students. Only when one's work is published in a "refereed" or "juried" journal will it contribute to one's standing as a scholar.

Today, health behavior researchers feel the need to move beyond traditional disciplinary boundaries, communicate with colleagues in other fields, and discover patterns that connect. The most striking change in health behavior research in the coming decades will be the transition from research dominated by a small number of disciplines to transdisciplinary research. The Institute of Medicine also predicts a shift toward more intervention-oriented research, which, in turn, will dictate a greater emphasis on community participation in research.[19]

The application of community-based participatory approaches to public health already has increased dramatically.[20,21] This growth also reflects movement from a largely singular focus on individual behavior change interventions to an ecological model focused on the interaction of social, environmental, and individual influences on health.[20,22,23] It also reflects an evolving belief that active participation by community members in researching and implementing interventions may lead to more successful outcomes than those that are achieved if interventions are executed exclusively by external researchers.[22,24,25] In *community-based participatory research* (CBPR), community members work with researchers to define the research problem and set research objectives, design research methods and instrumentation, collect and interpret the data, and use the results to guide program planning and evaluation.[20] Community members' involvement in creating new knowledge and determining how that information is used in the community change process addresses underlying social and political inequities and empowers the community. The inclusion of CBPR in the assets acquired during doctoral training also brings us closer to meeting the ideals set forth in the Institute of Medicine's pleas for improved research translation and dissemination.[19] Moreover, the transition toward increased involvement in CBPR further

necessitates the utilization of transdisciplinary research skills and perspectives mentioned earlier.

Doctoral candidates should conduct original research, based on theories, models, or concepts from the behavioral and social sciences, to improve understanding of health-related problems and their social, cultural, economic, political, interpersonal, and intrapersonal determinants. Doctoral candidates also should be challenged to think about the usefulness of their research, to reflect on its social consequences, and to share their research with their peers and other audiences. In so doing, they will gain a better understanding of how their research can be translated into practice.

The Role of Information Technology

The overarching disease prevention agenda for the Department of Health and Human Services (DHHS), *Healthy People 2010,* calls for attention to specific measurable objectives of importance. Section 11 of the agenda refers to 3 key information technology objectives that direct attention to the need for doctoral-level research competencies in health behavior research. These objectives include

11.1: Increase the proportion of households with access to the Internet at home;
11.2: Improve the health literacy of persons with inadequate or marginal literacy skills; and
11.4: Increase the proportion of health-related World Wide Web sites that disclose information that can be used to assess the quality of the web-site.

These objectives underscore the importance of understanding interactive communication technologies as tools for practice relevant to health behavior research and, ultimately, population health. The Science Panel on Interactive Communication and Health[26] has defined interactive health communication (IHC) as "the interaction of an individual—consumer, patient, caregiver, or professional—with an electronic device or communication technology to access or transmit health information or to receive guidance on a health-related issue." Many IHC applications exist, including health web sites, CD-ROM applications, and online chat groups. IHC offers many benefits in educating and promoting health of individuals and groups. People who use IHC applications are more likely to receive tailored feedback that is specific to their information needs, while maintaining their anonymity. IHC can enhance interactions with health professionals and other community members and provide increased opportunities for information and social support. IHC also allows for the widespread dissemination of ever-evolving health information without restrictions to geographical location and time.

Though computer applications are widely used in health behavior research and health promotion practice today, there remains an inadequate understanding of the consequences of this technology on human health. According to Berliner,[27] the medium itself may be transforming what it means to be a learner – and by extension – how one is or is not motivated to protect oneself from health risks in the social environment. Clearly, doctoral students should be encouraged to study computer applications as health promotion tools. However, a more ambitious research goal will be to explore the ways in which computer technology and the social environment mutually influence one another to promote and compromise the health of the population.

At an increasing rate, health behavior researchers are using a variety of information technology tools to address research questions, including the design, development, and evaluation of behavioral interventions. Thus, doctoral-level research training programs must become intentional about the advanced technology competencies they expect students to master during their course of study. Information technology applications should be integrated into graduate research methods courses, and doctoral students should be involved in research projects that provide opportunities to learn state-of-the-art technologies. We are now at a point where every doctoral student seeking to establish credentials as a health behavior researcher must be exposed to and receive specific training in the area of public health informatics. Moreover, the augmentation of informatics skills has been identified as one of the requisite public health workforce development needs of the early 21st century[19] and one, that if achieved, could decrease the gap that sepa-

rates researchers and practitioners.

The Preparation of Ethical Scholars/ Researchers

Research training in doctoral programs should insist upon ethical conduct. Doctoral students should be provided with "real-life" opportunities that require them to balance the potential risks and benefits of research involving human subjects. These research opportunities should be available to students at the beginning of their doctoral program.

The *preparation* of doctoral students as health behavior researchers should require them to have specific learning experiences about the Responsible Conduct of Research (RCR). RCR is defined as a "commitment to intellectual honesty and personal responsibility" or "adherence to rules, regulations, guidelines, and commonly accepted professional codes or norms."[28] In short, RCR means that researchers have integrity in their research practices. Doctoral programs should establish and enforce expectations that clarify or delineate the RCR standards for students and expect that graduate faculty model these standards in both their research and classroom teaching.[29]

Perhaps the single most significant factor that can either undermine or promote research integrity is the *environment* in which health behavior researchers do their work. Doctoral training programs in health behavior need to foster an environment that provides specific learning experiences for students that build research skills. Faculty mentoring should instruct, guide, counsel and strengthen students' skills in both research and the integrity of their application. Competitive research environments that tilt the balance toward quantity over quality of publications compromise research integrity. Our intent should be to develop researchers who value both systematic inquiry and an honest and responsible environment in which to practice it. This proposed environment is established in the classroom through direct instruction about research integrity that is then reinforced by faculty mentors who model those research integrity principles in practice. Above all, doctoral students should be encouraged to resist pressures to engage in poor science or to conduct research that serves only the parochial needs of a special interest group.

Research misconduct is generally categorized by fabrication – making up data or results that do not exist; falsification – providing misleading or intentionally inaccurate information that cannot be substantiated or sheds light on a work more positively than data would support; and plagiarism – using someone else's ideas or work without crediting them for having done so. These are the most egregious examples of research misconduct. Doctoral students need to learn this experience early in their training that conducting research with integrity is the only option. This will happen when faculties provide a research environment that rewards integrity and prohibits misconduct.

Careless research practices are really not research.[29] Such practices, however, do find their way into the literature, creating inaccuracies that are often difficult, if not impossible, to correct, even in the face of errata that journals publish. If we prepare our students and follow The Academy's guidelines about attention to consistency and detail, careless research practices are less likely to occur.

Statistical errors in health behavior research can produce results that are erroneous and lead to practices or applications that are misleading, or even harmful. The quality of health behavior research findings are a function of the design employed to answer the research question(s) and the analytical approaches that were used to explain the nature of relationships between and among variables studied. Students should experience a strong statistical training regimen that requires them to work with original or secondary data sets as they learn the progressive approaches to data analysis with special emphasis on multivariate techniques.[30] At the same time, students and faculty alike must consult with those who have the statistical expertise that will increase the probability of selecting the appropriate statistical methods and accurately interpreting their results.

Publication practices and authorship are other instances that can involve questionable research practices. Examples include improper authorship (order not earned, inclusion not justified, exclusion not justified), publishing multiple papers of selected findings from one data set beyond that which would be considered reasonable, and inaccurate references. Further, more journals are requesting

Table 1
Knowledge of the Field

What doctoral students need to know and be able to do	Habits of mind doctoral students need to develop
✓ Historical foundations of public health, health behavior, health promotion, and health education	✓ Keen awareness that they are preparing themselves to become a steward of their field
✓ The parameters of professional practice	✓ Basic desire for discovery
✓ Major and emerging theories of health behavior, including social ecological frameworks	✓ Intellectual curiosity about the research others have conducted in a specific area
✓ Research on risk and protective factors associated with the major sources of human morbidity and mortality	✓ Read research journals to gain more substance and to identify gaps in the knowledge base
✓ Outcomes of major preventive interventions	✓ Follow new developments in public health, health behavior, health promotion, and health education
✓ Major controversies in public health policy	
✓ Principles of RCR	

that each author identify the specific contributions made to the paper to justify their inclusion on the authorship list. A normative practice in research is that authorship listing is a function of contribution and authors are listed in descending order of that contribution.

Clarification regarding *data ownership* is another potential questionable research practice. Ownership needs to be established early and in writing, particularly in light of public health research that often involves multiple parties as part of participatory and collaborative practices.[31] Addressing this issue early avoids unnecessary conflicts later.

All health behavior research that involves humans must be reviewed by university *institutional review boards* (IRB) prior to commencing the research. Doctoral students should be responsible for completing human subjects review applications. The application process will require them to become familiar with the U.S. Code of Federal Regulations – Protection of Human Subjects, known as the

Table 2
Thinking Theoretically and Critically

What doctoral students need to know and be able to do	Habits of mind doctoral students need to develop
✓ Distinguish conceptual or analytic issues from empirical issues	✓ Respect for others' research
✓ Understand different theoretical perspectives and what each illuminates and obscures	✓ Awareness of one's own assumptions and possess a willingness to examine those critically
✓ Read broadly, in other fields, seeking connections that are not at first obvious	✓ Discrimination between knowledge and subjective beliefs
✓ Explain problems in the field using theory	✓ Willingness to change one's mind based on argument or evidence
✓ Produce a synthesis of the research literature on a topic	✓ Willingness to challenge conventional or popular educational practices and interventions
✓ Compare different ways of knowing	✓ Flexibility to adapt and apply theories to be relevant for diverse populations
✓ Compare across research methods and allied philosophical traditions	

Table 3
Frame Significant Questions

What doctoral students need to know and be able to do	Habits of mind doctoral students need to develop
✓ The research literature on a topic ✓ Identify knowledge gaps of public health significance ✓ Identify the inadequacies in existing measurement instruments and procedures that need to be challenged ✓ Specify causal processes ✓ Formulate clear research questions ✓ Formulate a testable hypothesis or hypotheses ✓ Identify critical elements of a research problem	✓ Passion for the ideas of one's research, but ability to view results objectively ✓ Willingness to take intellectual risks ✓ Willingness to subject one's research to peer review ✓ Tolerance for nonsignificant findings

Common Rule.[32] This code is available online at http://ohsr.od.nih.gov/mpa/45cfr46.php3. It provides elaborate detail regarding human subjects' protection including risk assessment and ensuring informed consent. Although students should experience and be responsible for completing human subjects review applications, the faculty advisor should be responsible for ensuring its completion.

All doctoral programs should require that students obtain RCR training. The federal government has provided leadership regarding RCR training with publication of PHS Policy on the Instruction of Responsible Conduct of Research (available at http://ori.dhhs.gov/html/programs/finalpolicy.asp). The National Institutes of Health has produced an online training course on the protection of human research protections (available at http://cme.nci.nih.gov).

Graduate faculty in health behavior doctoral programs need to maintain integrity in the research process for its own sake, as well as to model how research should be conducted for doctoral students. When graduate faculty follow these guidelines and require their doctoral students to do the same, we will be preparing generations of researchers who understand, value, and adopt research integrity.

The Designation of Graduate Faculty Status

Capable and qualified graduate faculty – active researchers in their own right – should direct doctoral-level and dissertation research. In addition, graduate faculty should be qualified to serve on doctoral committees that supervise interdisciplinary dissertation research. Academic departments should confer graduate faculty status only on those members who maintain a sustained involvement in research as documented by authoring publications in major refereed journals. Graduate faculty status should be considered a privilege. The designation should not be automatic or dependent upon academic rank, tenure status, or years of service to an institution. Departments should establish measurable criteria for faculty to receive *and* maintain graduate faculty status and provide incentives, such as research assistantships and other mechanisms that support research endeavors.

PART 2
Seven Outcomes of Learning the Practice of Health Behavior Research

In an essay on doctoral education for the Carnegie Foundation for the Advancement of Teaching, Richardson[3] presents a "crucial elements" framework that focuses on the outcomes of learning the practice of research. The 7 outcomes are intended to provide a model for establishing a new doctoral program or assessing and revising an existing one. For this paper, a number of Richardson's crucial elements have been modified to adapt them to the health behavior field.

The learning outcomes are not de-

Table 4
Partnerships With the Community

What doctoral students need to know and be able to do	Habits of mind doctoral students need to develop
✓ Build trusting relationships with people and groups in the community who work on a health problem and have been affected by it ✓ Understand how the profession and its research is viewed in the community ✓ Connect one's research to the work of practitioners and community members in the field ✓ Collaborate with other disciplines in the community ✓ Build upon strengths and resources in the community ✓ Ground research questions in practice, reflective of the needs of and priorities of the community, as well as theory ✓ Engage communities as partners in the research process ✓ Communicate research findings in ways that lay people can understand	✓ Understand that the purpose of research is to improve the health of the population ✓ See community criticism as contributing to the quality of one's research ✓ View one's research as a contribution to an ongoing community process ✓ Recognize, value, and use local knowledge sources in the research process ✓ Be sensitive to different public discourses in reporting research – depending upon the audience ✓ Value co-learning and capacity building among community partners ✓ Recognize and embrace the long-term process and commitment required for community-based participatory research

signed to map onto specific graduate courses, but instead provide a tool for determining the extent to which doctoral students learn the crucial elements in the program of study as a whole.[3] Many of these learning outcomes will not be mas-

Table 5
Identifying Appropriate Methods of Inquiry

What doctoral students need to know and be able to do	Habits of mind doctoral students need to develop
✓ Threats to validity of quantitative and qualitative designs ✓ Align researchable problems with appropriate methods of inquiry ✓ Identify useful sources of data ✓ Identify novel approaches to address research questions ✓ Explain the advantages and disadvantages of different sampling strategies ✓ Identify independent and dependent variables when appropriate ✓ Articulate the strengths and weaknesses of various methods of inquiry, including those selected for use in an investigation	✓ Respect for research participants ✓ Investigating research questions that involve uncertainty – not merely to support current beliefs on a topic ✓ Seek novel approaches to address research questions ✓ Seek and use feedback from faculty mentors, community members, and other experts ✓ Choose research methods without partisan loyalties – should be matched to research question ✓ Consider research methods used in previous research on the topic

Table 6
Collecting and Analyzing Data

What doctoral students need to know and be able to do	Habits of mind doctoral students need to develop
✓ Understand methods of analyzing both quantitative and qualitative data ✓ Develop quantitative measures to assess theoretical constructs ✓ Develop psychometrically sound quantitative measurement tools ✓ Select statistical tests based on data structure and statistical assumptions ✓ Develop proficiency in using various statistical software packages ✓ Interpret quantitative and qualitative data	✓ Openness to unexpected findings ✓ Consider alternative interpretations of the data and plausible rival hypotheses ✓ Seek and carefully consider criticism from lay persons and experts ✓ Avoid drawing conclusions that are not supported by the data ✓ Interpret one's findings in the context of the existing research literature

tered in courses, but will be learned through mentoring, guided research experiences, participation in community coalitions, conference attendance, etc. Richardson[3] proposes that doctoral students use the crucial elements framework to assess their progress in their program of study.

Possess Substantive Knowledge of the Field

In addition to understanding the foundations of the field, doctoral students should possess cutting-edge knowledge about the theoretical frameworks used in the discipline and the empirical research generated by it. Among the most important "habits of the mind" are a basic desire for discovery and a sense of intellectual curiosity. These habits find expression in the reading of research journals, a hallmark of active scholars (Table 1).

Think Theoretically and Critically

Health behavior scholars rely on theory to explain conditions that promote and compromise health as well as to design health promotion interventions. Theory functions as a conceptual framework for organizing data. Such frameworks allow us to impose meaning on isolated observations. Theory also allows us to explain relations among variables of interest (Table 2).

Frame Significant Research Questions

Doctoral students should understand that they are preparing to become stewards of the health behavior field. One of the obligations of being a steward is the transformation of the discipline.[2] Pursuit of innovation depends upon the ability to identify gaps in the knowledge base, the willingness to take intellectual risks, and a tolerance for nonsignificant findings (Table 3).

Establishing Research Partnerships With the Community

However broad or narrow the focus of the investigation, the goal of health behavior research is explicit: to improve the health of the population. A relatively unique aspect of the field is the emphasis on engaging the community in the research process whenever possible.[24] In their program of study, doctoral students should be provided opportunities to work in collaborative partnerships with community groups (Table 4).

Design Research

Doctoral students should be able to identify appropriate methods of inquiry without relying on allegiances to a particular assessment or evaluation paradigm. In selecting methods to address a research question, students should strive to generate the highest quality data while working diligently to respect and protect research participants (Table 5).

Collect and Analyze Data

Doctoral students should understand methods of analyzing both quantitative and qualitative data. In the health behav-

Table 7
Communicating Research

What doctoral students need to know and be able to do	Habits of mind doctoral students need to develop
✓ Characteristics of different audiences ✓ Different genres and forms of dissemination (eg, dissertation, data-based article, conceptual analysis, press releases) ✓ Writing precisely and plainly for technical and general audiences ✓ Effective oral presentation of one's research in professional and public forums ✓ Present findings with community members in a way that is culturally appropriate	✓ Seek opportunities to present one's research in professional and public forums ✓ View writing as part of the interpretive and analytic activity – rather than a "write-up burden" ✓ Seek peer review of one's work ✓ Expect peer review to lead to revision or even rejection ✓ Sensitive to different discourses in reporting research – depending upon the audience ✓ View one's published research as contributing to an ongoing dialogue in a community of scholars

ior field, proficiency in using statistical software is a high priority. A working knowledge of multivariate statistical procedures is crucial for generating high-quality research and answering complex questions. Qualitative methods and mixed methods are useful as well for addressing some research questions. Doctoral students should receive strong training in both traditions of research (Table 6).

Communicate With Various Audiences About Research

The ability to write precisely and plainly for both technical and general audiences is a skill that doctoral students need to develop during their program of study. The ability to present research in professional and public forums also is important. In this regard, it is crucial that students learn how to tailor presentations and discussions to the level of expertise of the audience (Table 7).

CONCLUSION

The positions taken by The Academy in this paper strongly endorse the view that the health behavior field is a scholarly discipline as well as a health promotion enterprise (or practice). Both the disciplinary study and the enterprise are complex endeavors. They cannot be extricated from one another because the transformation of the discipline and the preservation of best practices depend upon both. Thus, doctoral students who are to become the stewards of this field should be prepared to engage in scholarship that creates new knowledge, uses research to transform practice, and effectively communicates research findings. In these ways, doctoral-degree holders are distinguished from health promotion practitioners holding baccalaureate and master's degrees.

Why articulate a set of guidelines for research training excellence in doctoral programs? What practical value do these guidelines have for our field? The Academy believes there are a number of benefits for each of the constituencies that have a vested interest in doctoral-level research training programs. Most important, these guidelines can be used to strengthen the field's research capacity and thereby improve the nation's health. At the institutional or graduate- school level, the guidelines can assist in the allocation of resources to departments and programs that are meeting standards of excellence set by their discipline. They also may serve as a new benchmark for institutions in selecting faculty for prestigious research honors and awards, such as the university professor designation. At the departmental level, this document may be useful in leveraging additional institutional resources to build faculty research capacity, or it could provide planning assistance to academic departments seeking to launch a new doctoral program. The guidelines identified in this paper also could benefit departments in the recruitment of promising new re-

searchers and esteemed research faculty. Furthermore, departments offering baccalaureate and master's degrees might find the guidelines beneficial for assessing the ability of their programs to prepare students for doctoral-level research and to be strong applicants for admission to competitive programs. The guidelines described herein can provide prospective students from a variety of disciplines with a framework for comparing the research training offered by various doctoral programs, and they could be used in orientation programs for new doctoral students. ■

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Appendix A
AAHB Work Group on Doctoral Research Training: Contributing Authors in Alphabetical Order

Julie Baldwin, PhD, Professor, Department of Community and Family Health, University of South Florida, Tampa, FL. **Kenneth H. Beck**, PhD, FAAHB, Professor, Department of Public and Community Health, University of Maryland, College Park, MD. **David R. Black**, PhD, MPH, FAAHB, Professor, Division of Health Promotion/HKLS, Purdue University, West Lafayette, IN. **Carolyn L. Blue**, PhD, Professor, The University of North Carolina Greensboro, Greensboro, NC. **Brian Colwell**, PhD, Associate Professor, Department of Social and Behavioral Health, Texas A&M University System Health Science Center, School of Rural Public Health, College Station, TX. **Robert S. Gold**, PhD, DrPH, FAAHB, Dean, College of Health and Human Performance, University of Maryland, College Park, MD. **Robert J. McDermott**, PhD, FAAHB, Professor and Co-Director of the Florida Prevention Research Center, Department of Community and Family Health, University of South Florida, Tampa, FL. **Peggy O'Hara-Murdock**, PhD, Professor, HPERS Department, Middle Tennessee State University, Murfreesboro, TN. **R. Scott Olds**, HSD, Professor, Health Promotion Program, Kent State University, Kent, OH. **John P. Sciacca**, PhD, Professor and Chair, College of Health Professions, Northern Arizona University, Flagstaff, AZ. **Bruce Simons-Morton**, EdD, FAAHB, Chief, Prevention Research Branch, National Institute on Child and Human Development, Rockville, MD. **Dennis L. Thombs**, PhD, Associate Professor, Department of Health Education and Behavior, University of Florida, Gainesville, FL. **Mohammad R. Torabi**, PhD, MPH, FAAHB, Chancellor's Professor and Chair, Department of Applied Health Science, Indiana University, Bloomington, IN. **Marilyn J. Wells**, PhD, MPH, Assistant Professor, Department of Health, Physical Education, and Recreation, Hampton University, Hampton, VA. **Chudley (Chad) Werch**, PhD, FAAHB, Professor and Director of Addictive and Health Behaviors Research Institute, University of Florida, Department of Health Education and Behavior, Jacksonville, FL.

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Andrew Harver, PhD, Professor
Jan Warren-Findlow, PhD, Assistant Professor
Department of Public Health Sciences
College of Health and Human Services
University of North Carolina-Charlotte
9201 University City Boulevard
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October 24, 2011

Dear Drs. Harver and Warren-Findlow,

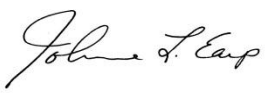
I'm writing as the chair of the Department of Health Behavior and Health Education (HBHE) at the UNC Gillings School of Global Public Health to express my support for the proposed PhD Program in Public Health Sciences in the Department of Public Health Sciences at UNC-Charlotte.

Our own department, lodged within a school of public health, has been offering the PhD in Health Behavior and Health Education since we were founded in 1943. Our doctoral curriculum is based in the social and behavioral sciences in public health, meaning that our research-based training-program shares many commonalities with UNC-C's proposed doctoral training program. For this reason, over the past 12 months, faculty from UNC-Charlotte have sought our input on how to strengthen their proposed program. We're pleased to see that, with this most recent iteration of the proposal (September 2011), UNC-Charlotte has outlined the makings of a rigorous and well structured doctoral program in our discipline. Based on this proposal, we believe that UNC-Charlotte has the resources to be able to launch and sustain its training program, even in a tight economy, such as the one we face now.

In determining the need for North Carolina's second doctoral training in social and behavioral sciences in public health, it may be well to understand that our own department, which has 15 tenured or tenure –track faculty and 10 fixed-term faculty (plus access to many other faculty across the School and University), has the capacity to enroll about 10 incoming doctoral students each year from a pool of over 100 exceptionally talented and competitive applicants. 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.). 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, especially if it were to start small, as it seem the proposed PhD Program in Public Health Sciences intends to do.

We wish the Department of Public Health Sciences at UNC-Charlotte every success with its proposed doctoral training program in Public Health Sciences. We believe the proposal reflects solid planning, and it seems the department has the resources to sustain the endeavor. Please feel free to contact me at jearp@email.unc.edu if you have any questions.

Sincerely,



Jo Anne L. Earp, ScD
Professor and Chair

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20 October 2011

Dr. Vivian Lord
Interim Chair and Professor
Department of Public Health Sciences
University of NC at Charlotte
9201 University City Blvd.
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Dear Dr. Lord

We are pleased to offer our strongest possible support for the establishment of a PhD program in the Department of Public Health Sciences at the University of North Carolina at Charlotte. The proposed program will offer valuable opportunities that fill an important niche in the State of North Carolina, and in the region.

The proposed program is being developed in such a way as to be a value-added, rather than a competitor, for other doctoral training programs around the state including the Doctor of Public Health program at UNCG. The complimentary nature of the program being developed at UNCC is an opportunity for us, and for the other related doctoral programs, to collaborate on graduate education. This will result in enhanced support for governmental public health, and for agencies that provide services throughout the state. It will also result in enhanced employment opportunities, and income generation, through the new research that will be generated, and the translation of that research to health improvement throughout the State.

Thank you for the opportunity to review and discuss your proposed program prior to its establishment. The Department of Public Health Education at UNCG looks forward to collaborating on graduate training and research opportunities in the future.

Sincerely,

Daniel L. Bibeau

Daniel L Bibeau, PhD
Professor and Department Chair

CABARRUS HEALTH ALLIANCE
the public health authority of cabarrus county

September 26, 2011

Vivian B. Lord, PhD
Interim Chair, Department of Public Health Sciences
University of North Carolina Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Dear Dr. Lord:

I have been closely involved with The Department of Public Health Sciences (PHS), in the College of Health and Human Services (CHHS) for almost two decades. In addition to serving on the school advisory committee, I have served as an adjunct professor for many years and was the interim director of the M.H.A. program for one year. To say the least, I have been excited as the University has expanded its public health academic program and established a strong public health presence in this region of the state. Your efforts to establish an accredited School of Public Health are impressive and having initiated accreditation of the M.H.A. program, I can fully appreciate the hard work and dedication you have devoted to this goal.

I fully support your application to implement a PhD in Public Health Sciences at UNC Charlotte. The proposed program is much needed in this area and will advance the collaboration public health practitioners and policy makers as we work to solve the pressing public health problems confronting us in this new century. PhD trained public health researchers will enhance our efforts to move North Carolina from the lower tier in public health rankings.

We look forward to the approval of this application and to the expansion of the University's public health research efforts in our region. Working together I am confident we can utilize the research expertise of this new PhD program to address long-standing public health problems in North Carolina.

Sincerely,

William F. Pilkington, D.P.A.
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07 August 2011

Vivian B. Lord, PhD
Interim Chair, Department of Public Health Sciences
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Dear Dr. Lord:
Please allow this letter to demonstrate my enthusiastic support for the Request for Authorization to Establish a PhD in Public Health Sciences: Behavioral Sciences that you have shared with me. As a the Director of the R. Stuart Dickson Research Institute, the Director of Research for the CMC Department of Family Medicine, and as a physician at Carolinas HealthCare System, I clearly see the value that this new program will bring to our community.

Specifically, I feel that this important doctoral degree program will provide a vital connection between medicine and public health. Within my own patient population I have seen the changing demographics that are influencing both Charlotte and the country as a whole – the growth in the Hispanic and other immigrant populations, increasing numbers of older adults, and a high prevalence of children and adults who are obese. The cultural issues we face in providing high quality medical care have never been greater. These health care challenges reinforce the need for teachers and researchers trained in the complex social and behavioral influences that affect individual and population health. This program directly addresses these critical emerging issues.

I am very supportive of this program as it furthers regional training in public health, and as it advances the University's strategic plan to establish an accredited School of Public Health. Expanding the availability of public health training will benefit our region and community. This program in particular will promote a deeper collaboration and integration between the University of North Carolina at Charlotte and Carolinas HealthCare System – the third largest healthcare system in the country.

In closing, I strongly endorse this plan to establish a PhD in Public Health Sciences and will be delighted to assist in serving in an advisory role as well as providing opportunities for you student to gain exposure to a large community healthcare system.

Sincerely,

Michael Dulin, MD, PhD

October 5, 2011

Vivian B. Lord, PhD
Interim Chair, Department of Public Health Sciences
University of North Carolina Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Dear Dr. Lord:

Let me communicate my support for the Department of Public Health Sciences to design and develop a PhD program in Public Health Sciences in the College of Health and Human Services (CHHS). My support stems from both an academic and provider standpoint.

Our healthcare services industry is in major transition, which I will not attempt to describe in this letter. Yet, as a result of the various transitions our healthcare services industry must be able to respond and hopefully lead appropriately. The major reasons I endorse the PhD program in Public Health Sciences are the following:

There is a resounding consolidation across the continuum of care – we have a very fragmented method of providing systematic and continuous health services that are needed and rendered, beginning with healthy prenatal care, health promotion, and primary disease prevention to continuing the provision of the appropriate level of care toward the end of life. With consolidations (public health functions, mental health functions, physician practices, and hospital/health systems) growing at a significant rate, there is a tremendous need for the PhD in Public Health Sciences to help determine 'how the continuum of care will be affected and how to design it to best respond with the appropriate care'.

There is an increased focus on new strategic models – the best example is the IHI Triple Aim addressing how: a) to improve population health (our whole communities how ever we define them), b) to enhance the experience of care for individuals, and c) to reduce the per capita cost. With this strategic model in mind, the PhD in Public Health Sciences would allow better modeling, planning, and delivery toward the best outcomes possible.

And finally, there is a need to recognize, appreciate, and take advantage of the outstanding healthcare services resources available in our region – the diversity of the healthcare services resources is plentiful. For example we have - numerous and autonomous health departments, strong community hospitals (both for and not-for-profit),

Veterans Administration hospital in Salisbury, numerous physician practices (independent and those already aligned with integrated delivery systems (IDNs)), nearby academic medical centers (Duke, UNC, Wake Forest), and two very strong multi-hospital systems (CHS and Novant just to name those in Charlotte). Therefore, the 'ecosystem' for utilizing the PhD in Public Health Sciences is within immediate reach.

Perhaps my perspective toward endorsing the PhD program in Public Health Sciences is unique. I am significantly committed to the University of North Carolina Charlotte and its College of Health and Human Services. I currently serve on the colleges' MHA Advisory Board and the SPH Steering Board. I was adjunct graduate faculty teaching 'Intro to US Health Care System' for a couple semesters. Additionally, I have worked in healthcare since 1976 in various roles, with my current role as VP Growth and Development with Novant Health. Finally, I was fortunate to be elected and serve as the ACHE Regent for NC from 2005-2008. I would love to see this school strive and thrive toward making our healthcare services industry a more integrated system for all of us.

Should you have any questions, please do not hesitate contacting me by email at tselmore@novanthealth.org or my mobile phone 704.236.3998. I hope this letter of support is helpful in the final review.

Sincerely,

Tom Elmore, FACHE
VP Growth & Development
Novant Health

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October 11, 2011

Dr. Vivian B. Lord
Interim Chair and Professor
Department of Public Health Sciences
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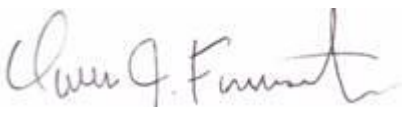
Dear Dr. Lord:

Thank you for the opportunity to review and comment on the justification document for the Ph.D. in Public Health Sciences – Behavioral Sciences, prepared by a transdisciplinary team of university faculty and community professionals. The justification document is thoroughly researched and presents a well designed plan for implementing doctoral programming in Public Health Sciences at UNC Charlotte. The need for this program in the Charlotte region and larger state of North Carolina is well documented. I am especially impressed with the research and programmatic foci on the health and wellness issues facing immigrants and traditionally under-served populations. The latest 2010 census data documents Charlotte's continued trajectory as a "Hispanic Hypergrowth" metro, with 13.1 percent of the city's population self identified as Latino.

My colleagues in the UNC Charlotte Urban Institute and the Center for Applied Geographic Information Science (GIScience) will be potential collaborators and partners in the Public Health Sciences Ph.D. Program. We strongly endorse this plan and look forward to working together.

Sincerely,



Owen J. Furuseth, Ph.D.
Associate Provost for Metropolitan Studies and Extended Academic Programs, and
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September 22, 2011

Vivian B. Lord, PhD
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Dear Dr. Lord:

As you know, I have worked closely with The Department of Public Health Sciences (PHS), in the College of Health and Human Services (CHHS), as a member of its School of Public Health Steering Committee for several years. I have been impressed with the thoughtfulness and with the deliberate approach you and your colleagues have taken in your efforts to establish an accredited School of Public Health.

As part of this effort the Department proposes to implement a PhD in Public Health Sciences at UNC Charlotte. The proposed program will be an "umbrella" degree with an initial concentration on social and cultural factors that inform health outcomes. Increasingly, public health practitioners and policy makers recognize that public health issues stem from underlying social issues like poverty and crime. The Healthy People 2020 objectives recognize these relationships and emphasize the importance of the broader set of behavioral interventions. Given this reality, to prevent and address important public health issues will require well-trained public health researchers with expertise in social and behavioral sciences.

The Department provides a strong foundation for this doctoral program with faculty that are expert in the core public health disciplines and are experienced in the teaching and advising of doctoral students in existing program like the Health Services Research Doctoral Program and Health Psychology PhD. In addition, the faculty's history of collaboration with faculty in other programs throughout the university is a springboard from which to leverage the expertise of faculty from other behavioral disciplines.

I am confident the Department of Public Health Sciences will design and develop a rigorous PhD program in Public Health Sciences that recognizes today's pressing and growing public health needs; that leverages the existing research programs and resources available across UNC Charlotte's campus; and that takes advantage of those opportunities that stem from a program that resides in Charlotte.

With Regards,

John Graham

Dr. John W. Graham
Deputy Director of Outreach and Consultation
North Carolina Institute for Public Health
UNC-CH Gillings School of Global Public Health

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October 4, 2011

Vivian B. Lord, PhD
Interim Chair, Department of Public Health Sciences
University of North Carolina Charlotte
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Dear Dr. Lord:

Since joining the UNC Charlotte Public Health Advisory Board in October 2006, I have participated in program planning and implementation that resulted in our Public Health Programs receiving Council on Education for Public Health (CEPH) accreditation , assisted in the hiring of outstanding faculty, and observed substantial increases in applications to our undergraduate (BSPH) and graduate (MSPH) public health programs. These successes validate our goal of training public health professionals to serve urban communities, especially in the Metrolina Region of North Carolina.

We are now at our next critical juncture – requesting approval to establish a PhD in Public Health Sciences: Behavioral Sciences. This program is designed to focus on social and cultural factors that inform health outcomes. If approved, it would contribute to the doctoral programs required for becoming an accredited school of public health.

Daily, my health department works to mesh policy, environmental and personal behavior change; given this challenge, I see great need for researchers who can build innovative programs to address sedentary behavior, high-risk sexual behavior, pregnant teens, tobacco use, and chronic disease. The key to success with this programming is to: understand how socio-economic issues influence poor health; build meaningful alliances with other community agencies – such as Departments of Social Services, Planning, Police, and the County Schools; and build mechanisms so we can work with our partners to prevent and solve public health threats. And, it is essential that we use evaluation strategies that are easy and inexpensive to implement. With the many health and health-related issues facing our communities, and particularly the poor and underserved, this is a daunting task.

With the PhD in Public Health Sciences: Behavioral Sciences, UNC Charlotte would prepare public health researchers with expertise to help us address these issues. With UNC Charlotte's strong public health faculty this vision is realistic and portends well for this much needed program.

Without hesitation, it is my pleasure to unequivocally endorse the PhD in Public Health Sciences: Behavioral Sciences. I wish you success in securing approval to implement this greatly needed program. Please let me know how I may be of assistance to make this vision a reality.

Sincerely yours,

William Gross, MPH
Special Projects Manager
Gaston County Health Department

C.W. Williams
COMMUNITY HEALTH CENTER

Generations of Care

October 6, 2011

Vivian B. Lord, PhD
Interim Chair, Department of Public Health Services
University of North Carolina Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Dear Dr. Lord:

As a member of the School of Public Health (SPH) Steering Board, I am very aware about the University's plans. As you know, I have consistently supported and advocated for the school's growth and development.

As a part of this effort, the Department proposes to implement a PhD in Public Health Services at UNC Charlotte. It is designed to be 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. The importance and relevance of the initial emphasis on behavioral science are evident in the overarching goals identified in Health People 2020.

I have personally observed the Department providing a solid foundation for this doctoral program with faculty that are exceedingly knowledgeable in the core public health disciplines and experienced in the teaching and advising of doctoral students in existing programs like the Health Services Doctoral Program and Health Psychology PhD. Furthermore, the faculty's history of collaboration with faculty in other programs throughout the university allows the Department to leverage the expertise from other behavioral disciplines.

I consider it a privilege to provide this letter of support and am very confident the Department will design and develop a strong and rigorous PhD program in Public Health Sciences that recognizes today's pressing and growing public health needs, that leverages the existing research resources available across the UNC Charlotte campus; and that takes advantage of those opportunities that stem from a program that resides in Charlotte.

Sincerely,

Beverly Irby
CEO
C. W. Williams Community Health Center

MECKLENBURG COUNTY
Health Department

E. Winters Mabry, MD
Health Director

(704) 432-3199
(704) 432-0217 (Fax)

October 11, 2011

Vivian B. Lord, PhD
Interim Chair, Department of Public Health Sciences
University of North Carolina Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Dear Dr. Lord:

It has been my pleasure to serve on the Advisory Board of the College of Health and Human Services and to witness the growth of the Department of Public Health Sciences. The carefully planned and executed expansion in faculty, course offerings and student enrollment and the achievement of CEPH accreditation are evidence of your department's deliberative approach to establishing a School of Public Health.

The addition of the proposed PhD program in Public Health Sciences with its focus on social and behavioral health sciences will both strengthen the Department and provide additional resources in a critical area of public health. It is consistent with the national *Healthy People 2020* objectives and those of *Healthy North Carolina 2020: A Better State of Health.* This program will be a valuable resource for the training of researchers, and provide public health practitioners in the region and state with expertise to guide the implementation of programs and the development of policy and environmental changes that improve the health of the community.

The College of Health and Human Services and the Department have made great strides in establishing links to public health professionals, and your future plans have resonated with practitioners in Mecklenburg County and beyond. This is seen in the willingness to provide meaningful internships for your students, to collaborate on research and in joint efforts such as the Community Health Forum. This doctoral program, with a foundation of academic rigor linked to population-based research and practice, is a welcome addition to the vital role you play in our community.

I look forward to ongoing collaboration with you and your colleagues.

Sincerely,

E. Winters Mabry

E. Winters Mabry, MD
Health Director

UNC CHARLOTTE

Vice Chancellor for Research and Economic Development

9201 University City Boulevard, Charlotte, NC 28223-0001
t/ 704.687.2291 f/ 704.687.2292

October 26, 2011

Vivian B. Lord, Ph.D.
Interim Chair, Department of Public Health Sciences
University of North Carolina Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Dear Dr. Lord:

I strongly support the proposal for a Ph.D. in Public Health Sciences at UNC Charlotte. This degree program, part of the growing portfolio within the College of Health and Human Services, will train researchers and professionals to address contemporary public health problems at the individual, community and population levels. Graduates of this program will possess critical knowledge and skills that are needed for our future healthcare and health management systems. The research that students and faculty pursue during the course of Ph.D. studies will chart new directions for the future of both the regional and national healthcare agenda.

Research and Economic Development at UNC Charlotte strives to advance the quality, diversity and growth of research at UNC Charlotte. We place a special value on the translation of research results that impact our social, cultural, and economic communities. This Ph.D. program is highly aligned with the goals that UNC Charlotte sets for research and economic development. As this Ph.D. program is implemented, I look forward to working with you and will assist in all means possible to develop extramural funding and sustain a highly successful research program.

Sincerely,

Robert G. Wilhelm, Ph.D.
Vice Chancellor for Research and Economic Development