



UNIVERSITY OF KENTUCKY

Dream · Challenge · Succeed

COLLEGE OF PUBLIC HEALTH

M E M O R A N D U M

TO: Health Care Colleges Council

**FROM: James W. Holsinger, Jr., PhD, MD
Associate Dean for Academic Affairs**

SUBJECT: Certificate Change Proposal – Maternal and Child Health

DATE: November 25, 2013

The University of Kentucky's MCH Certificate was formally approved on May 15 of 2008 and has been enrolling and awarding certificates to approximately 10 students each year since 2009.

While the MCH Certificate has been successful in the past three years, the MCH Institute Leadership Committee (comprised of both University of Kentucky faculty and Kentucky Department for Public Health MCH professionals) and the College felt that revisions are necessary in three areas: certificate goals/objectives; required courses; and selections for elective coursework. The details of these revisions are included in the full certificate change proposal.

After the revisions were completed, the proposal was reviewed and approved by the Academic Affairs Committee and the Faculty Council, according to our college's established bylaws.

Further information about this course can be obtained by contacting the program's proposed director, Dr. Lorie Chesnut, at 218-2226 or via email at lorie.chesnut@uky.edu.

University of Kentucky

College of Public Health

August 29, 2013

Revision of the Graduate Certificate in Maternal and Child Health

Purpose and Background:

Maternal and Child Health (MCH) issues are among the most prevalent in the Commonwealth of Kentucky. According to March of Dimes Peristats¹, in an average week in Kentucky, of the 1,073 babies born, 129 are born to teen mothers, 380 are delivered by cesarean section, 147 babies are born preterm and 8 babies die before their first birthday. In 2011, 32.2% of all women of childbearing age were smokers and 31.1% were obese. Despite strong Medicaid and KCHIP enrollment efforts, 7.5% of children under the age of 19 were uninsured. While the infant mortality rate (IMR) of 6.8/1,000 was relatively low in comparison to other southern states, the IMR for Black infants was 10.7/1,000 with postneonatal death trends steadily increasing for all races².

The University of Kentucky's MCH Certificate was formally approved on May 15 of 2008 and has been enrolling and awarding certificates to approximately 10 students each year since 2009. When founding Director James C. Cecil III, DMD, MPH, retired in 2011, leadership for the Certificate was assumed by Wayne T. Sanderson, Ph.D. CIH, with administrative support provided by Lorie Wayne Chesnut, MPH. Obtaining her doctorate in late 2012, Dr. Chesnut was appointed Certificate Director in April of 2013 when she was promoted to the level of Assistant Professor in the Department of Epidemiology.

While the MCH Certificate has been successful in the past three years, the MCH Institute Leadership Committee (comprised of both University of Kentucky faculty and Kentucky Department for Public Health MCH professionals) and the College felt that revisions are necessary in three areas: *certificate goals/objectives; required courses; and selections for elective coursework.*

First, it was decided that the certificate should have an overarching goal with objectives that reflected the federal Maternal and Child Health Leadership Competencies (Maternal and Child Health Bureau)³ and MCH competencies developed by the national Association of Teachers in Maternal and Child Health (ATMCH)⁴. These competencies are the foundation for all classes in maternal and child health and together provide a complete template for planning and maintaining an MCH Program at a departmental level.

Revisions are also necessary to both the required coursework and the elective coursework to assure adequate focus and rigor for the sequence of classes undertaken by students accepted into the certificate. These changes will also allow for more valid assessment of student learning.

¹ Peristats: National Center for Health Statistics, period linked birth/infant death data. Retrieved August 06, 2013, from www.marchofdimes.com/peristats.

² Ibid.

³ Maternal and Child Health (MCH) Competencies - Association of Teachers of Maternal and Child Health. (February, 2001) ASPH Education Committee MPH Core Competency Development Project Version 2.3 (May, 2007) Accessed 08/06/13 at <http://www.atmch.org/documents/mchcomps.PDF>

⁴ Maternal and Child Health Leadership Competencies, Version 3.0. (June, 2009) Accessed 08/06/13 at http://leadership.mchtraining.net/mchlc_docs/mch_leadership_comp_3-0.pdf

Graduate Certificate Director:

Lorie Wayne Chesnut, MPH, DrPH assumed the position of Director of the MCH Graduate Certificate in April 2013 after working in the capacity of Certificate Administrator for two years. Dr. Chesnut is a faculty member in the Department of Epidemiology, College of Public Health. Prior to joining the department, she worked in the field of maternal and child health (MCH) epidemiology for over fifteen years, initially for the Kentucky March of Dimes Birth Defects Foundation and later for the Kentucky Department for Public Health. During her time at the state office, she coordinated reporting for the Title V Maternal and Child Health Block Grant through the federal Title V Information System, worked as an epidemiologist in Kentucky's oral health program and wrote numerous federal grants. She is currently a reviewer for the federal Maternal and Child Health Bureau and an adjunct faculty member of the University of Arizona Mel and Enid Zuckerman College of Public Health.

Revisions to the Graduate Certificate in Maternal and Child Health

Goal (New):

The goal of the UK CPH Graduate Certificate in Maternal & Child Health is to prepare public health workers to address multi-factorial Maternal and Child Health (MCH) issues in their communities with a sense of purpose and moral commitment.

Objectives (Revised):

1. To provide participants with theoretical, practical, and relevant educational experiences in MCH to enhance the health and welfare of children, mothers and families using the life course approach.
2. To use population data to assist in determining the needs of MCH populations for the purposes of designing programs, formulating policy and conducting research or training.
3. To describe health disparities within MCH populations, offer strategies to address them and respond appropriately to needs based on sensitivity to and respect for diverse cultural and ethnic backgrounds and socioeconomic status.
4. Demonstrate the use of a systems approach to explain the interactions among individuals, groups, organizations and communities to improve health outcomes of MCH populations.

Discussion:

The MCH Committee felt that an overarching goal was needed for the certificate and that the former Objective #1 was more appropriate as a goal than it was as an objective. Therefore, this objective was slightly revised and will serve as the Certificate Program goal.

The original Objective #2 was retained with slight modifications to highlight the federal initiative in maternal and child health (lifecourse approach) while Objectives 2, 3 and 4 correspond directly with federal Maternal and Child Health Leadership Basic and Advanced Competencies.

Curriculum:

The Graduate Certificate will continue to consist of 15 credit hours, 6 of which are required courses and 9 of which can be selected from the list of electives below.

Current MCH Certificate	Proposed MCH Certificate
Required Classes (6 credit hours)	Required Classes (6 credit hours)
CPH 740 – Intro to MCH	CPH 740 – Intro to MCH
CPH 605 – Intro to Epidemiology	CPH 714 – MCH Info & Data Systems
Electives (9 credit hours)	Electives (9 credit hours)
CPH 610 - Injury Epidemiology	CPH 610 - Injury Epidemiology
CPH 641 – Public Health and Anthropology	CPH 641 – Public Health and Anthropology
CPH 645 – Food Systems and Malnutrition	CPH 645 – Food Systems and Malnutrition
CPH 647 – Research Methods	CPH 646 – Women’s Health
CPH 648 – Eliminating Health Disparities	CPH 648 – Eliminating Health Disparities
CPH 653 – Public Health Law and Policy	CPH 653 – Public Health Law and Policy
CPH 660 – GIS and Public Health	CPH 715 – Perinatal Epidemiology
CPH 715 – Perinatal Epidemiology	CPH 751 – Intro to Global Public Health
CPH 714 – MCH Info & Data Systems	CPH 754 – Health Care Access and Coverage
CPH 751 – Intro to Global Public Health	CNU 502 – Obesity: Cell to Community
CPH 754 – Health Care Access and Coverage	FAM 502 – Families and Children under Stress
CNU 502 – Obesity: Cell to Community	NFS 516 - Maternal and Child Nutrition
FAM 502 – Families and Children under Stress	
NFS 516 - Maternal and Child Nutrition	

Required Courses (Revised):

CPH 740 – Introduction to Maternal and Child Health (3 hrs).

CPH 714 – MCH Information and Data Systems (3 hrs).

(This course has been taught before under Special Topics Number [CPH 718] and is now being proposed as a new course).

Course Description: This course will equip participants with basic skills in identifying, accessing, interpreting and utilizing U.S. maternal and child health data systems at the national and state level. Participants will learn the essential ways that secondary data sources inform public health practice and how to interpret and present information from these sources. They will also learn key skills in data interpretation, data linkage, working with small numbers, stratifying data by population sub-groups and examining trends over time.

Discussion:

CPH 740 Introduction to Maternal and Child Health will continue to be a required course for all Certificate students. In addition to this course, **CPH 714 MCH Information and Data Systems** will be taught instead of CPH 605 Introduction to Epidemiology. It is designed specifically to have an MCH focus.

The MCH Institute Leadership Committee decided to remove CPH 605 as a required course because so many students had already taken it as part of the requirements for the MPH program. Those originally designing the Certificate may have anticipated students from outside the University enrolling in this Certificate and for

these students, requiring a basic epidemiology course would be reasonable and prudent⁵. But the majority of MCH Certificate students are also current MPH, DrPH or PhD students. These students have been able to apply previously earned credits to this certificate, allowing them to obtain the Certificate even while taking far fewer credit hours than the 15 required.

Finally, together, these two courses cover all of the MCH competencies required by the MCH Certificate and provide a solid framework for maternal and child health. With students consistently enrolling in these two classes, Certificate Assessment will be more accurate, comprehensive and valid.

Elective Courses (Revised):

Courses Removed

The following courses will be removed from the elective course offerings because they do not have a primary focus on maternal and child health:

CPH 605 Introduction to Epidemiology

CPH 647 Research Methods for Health Promotion

CPH 660 GIS [Geographic Information Systems] and Public Health

This will also solve the problem noted in the initial letter of approval for the original course by the Faculty Council (2008) where it is noted *“that it would be possible for an MPH student concentrating in Health Behavior to automatically satisfy the requirements for the certificate by choosing the certificate electives to coincide with the MPH electives”*. This has been a challenge for the MCH Certificate that would now be somewhat mitigated with the removal of these courses.

Courses Added

The following two courses will be added to the elective course offerings.

CPH 646 Women’s Health (3 hrs). *“This course will cover a variety of women’s health topics including substance abuse, violence against women, nutrition, chronic diseases, reproductive and sexual health, and menopause. The course content will also emphasize the social, economic, environmental, behavioral, and political factors associated with women’s health. These content areas will be addressed using a lifecourse perspective. The epidemiology, measurement and interpretation of these factors, and how these factors can be translated into interventions, programs, and policy, will be of major interest. The focus will be both within in the United States and internationally”*.

CPH 715 Perinatal Epidemiology (3 hrs). *“While birth outcomes for women nationally and internationally are generally improving, too many women continue to experience disparate outcomes, particularly those who are poor, who lack adequate access to prenatal care and for whom high-risk neonatal intensive care units (NICU’s) and follow-up care are not available. This course will prepare students who are interested in understanding and exploring why morbidity and mortality occur, providing them with both basic clinical knowledge and epidemiologic understanding of key topics. Students will work with birth and death data*

⁵ We will recommend that students who apply to the MCH Certificate, but who are also enrolled in other degree-granting programs, enroll in **CPH 605 Intro to Epidemiology** to gain a basic understanding of epidemiological principles.

using SAS, SPSS or STATA to gain experience in secondary data analysis; from initial data base organization and cleaning through descriptive analysis and interpretation of the content”.

No other changes are anticipated.

Courses Retained

College of Public Health Courses

CPH 610 – Injury Epidemiology and Control (3 hrs). CPH 610 is a course that explores “The epidemiologic basis for understanding the distribution and determinants for injuries and poisonings, including both intentional and unintentional events. A wide variety of injury settings are discussed including home, transportation, occupational, recreational, plus violence, suicide, and homicide. The continuum of injury using pre-event, event and post-event concepts of Haddon’s matrix is also emphasized.”

CPH 641 – Public Health and Anthropology (3 hrs).

“This seminar explores the contributions that anthropology, the academic field that focuses on the study of human culture, can make towards a better understanding of health behavior in the context of public health.... We will consider how the perspectives and tools developed in anthropology can be utilized in public health to help understand culture, both in the United States and in developing countries.” This course has a module on MCH which includes topics such as preventive child services, learning from caregivers of young children, children and medicines, care-seeking for illness in young infants in an urban slum in India, and midwifery, home births, and emergency obstetric referrals in Guatemala”.

CPH 645 – Food Systems and Malnutrition and Public Health (3 hrs). “This course explores key issues in public health and malnutrition through a food systems perspective. Understanding how the various parts of the food system interact is essential in the design of effective public health policy and projects to combat malnutrition in all its various forms. ... we will look at public health nutrition challenges throughout the food system, both in the US and in the developing world.”

CPH 648 – Eliminating Health Disparities (3 hrs). “This course will help the learner understand differences in minority populations in order to help build and lobby for the infrastructure needed to prevent excess disease and death among underserved populations. A special emphasis in this class will be placed on understanding the role of culture in influencing the adaptation of health attitudes, practices, and behaviors. An additional focus will be placed on health status, current trends, and health indicators for special populations.”

CPH 653 - Public Health Law and Policy (3 hrs). This course provides an “overview of public health law with emphasis on topics and materials used by public health practitioners, as well as the use of law to advance a public health agenda”.

CPH 751 – Introduction to Global Public Health (3 hrs). “This course will acquaint students with the major issues and challenges for public health in a variety of wealthy, emerging, and impoverished nations and with the impact of local or regional issues on national and/or global levels”.

CPH 754 – Health Care Access and Coverage (3 hrs). “This is a selective policy course offered to give students a greater understanding of programs available to serve underserved populations, how the changes in the health care market impact care provided to underserved populations, and policy and programmatic options to address the needs of underserved populations.”

Courses taught elsewhere within the University of Kentucky

CNU 502 – Obesity: Cell to Community (2 hrs). “This course will provide an overview of the obesity epidemic from an applied clinical as well as public health perspective. Topics to be covered include etiology, pathophysiology, evaluation, treatment, management, and prevention of obesity throughout the lifecycle”. *(College of Health Sciences: Clinical Nutrition)*

FAM 502 – Families and Children under Stress (3 hrs). “An investigation of the stressors and crises experienced by families and the examination of family members’ adaptation and coping efforts. Special attention is given to prevention, management, and enrichment strategies. Implications for practitioners will be drawn from conceptual frameworks and recent research”. *(College of Agriculture, Food and Environment; School of Human Environmental Sciences: Family Sciences)*

NFS 516 - Maternal and Child Nutrition (3 hrs). “The emphasis of this course is on normal maternal and child nutrition. The connection between nutrition and the outcome of pregnancy will be closely studied. In addition, areas of specific nutritional need such as adolescent pregnancy, alcohol, tobacco, drug and caffeine use during pregnancy, lactation, infant feeding practices world-wide, educational needs of parents and maternal and child support systems are addressed. Attention may be paid to nutritional support to mothers and children at risk from AIDS, cancer, diabetes and other disease conditions.” *(College of Agriculture, Food and Environment; School of Human Environmental Sciences: Dietetics and Human Nutrition)*

Note: Under the University of Kentucky Graduate School **Graduate Certificate Guidelines**, all elective courses must be approved by the Certificate Director. If other existing classes or classes to be developed are identified, and if they meet an identified need within the Certificate Curriculum, they too may be counted toward fulfillment of the Certificate upon approval of the Certificate Director.