MEMORANDUM

TO: Robert S. Gold
Dean, School of Public Health

FROM: Elizabeth Beise
Associate Provost for Academic Planning and Programs

SUBJECT: Proposal to Modify the Curriculum of the Ph.D. in Public and Community Health (PCC log no. 10053)

On May 6, 2011, the Senate Committee on Programs, Curricula, and Courses approved your proposal to modify the curriculum of the Ph.D. in Public and Community Health. A copy of the approved proposal is attached.

The change is effective Fall 2011. The School should ensure that the change is fully described in the Graduate Catalog and in all relevant descriptive materials, and that all advisors are informed.

MDC/
Enclosure

cc: David Salness, Chair, Senate PCC Committee
Sarah Bauder, Office of Student Financial Aid
Reka Montfort, University Senate
Erin Howard, Office of Information Technology
Donna Williams, Institutional Research & Planning
Anne Turkos, Archives
Linda Yokoi, Office of the Registrar
Thomas Castonguay, Graduate School
Coke Farmer, School of Public Health
Elbert Glover, Behavioral and Community Health
THE UNIVERSITY OF MARYLAND, COLLEGE PARK
PROGRAM/CURRICULUM/UNIT PROPOSAL

• Please email the rest of the proposal as an MSWord attachment to pcc-submissions@umd.edu.
• Please submit the signed form to the Office of the Associate Provost for Academic Planning and Programs, 1119 Main Administration Building, Campus.

College/School:
College/School Unit Code-First 8 digits: 01203300
Unit Codes can be found at: https://hvpprod.umd.edu/Html_Reports/units.htm

Department/Program:
Department/Program Unit code-Last 7 digits: 1330301

Type of Action (choose one):
X Curriculum change (including informal specializations) □ New academic degree/award program
□ Renaming of program or formal Area of Concentration □ New Professional Studies award iteration
□ Addition/deletion of formal Area of Concentration □ New Minor
□ Suspend/delete program □ Other
Italicics indicate that the proposed program action must be presented to the full University Senate for consideration.

Summary of Proposed Action:

APPROVAL SIGNATURES - Please print name, sign, and date. Use additional lines for multi-unit programs.

1. Department Committee Chair
   [Signature]
   [Date]
   [Name]

2. Department Chair
   [Signature]
   [Date]
   [Name]

3. College/School PCC Chair
   [Signature]
   [Date]
   [Name]

4. Dean
   [Signature]
   [Date]
   [Name]

5. Dean of the Graduate School (if required)
   [Signature]
   [Date]
   [Name]

6. Chair, Senate PCC
   [Signature]
   [Date]
   [Name]

7. University Senate Chair (if required)
   [Signature]
   [Date]
   [Name]

8. Vice President for Academic Affairs & Provost
   [Signature]
   [Date]
   [Name]
I. OVERVIEW OF PROPOSAL

This is a proposal for a modification to the approved curriculum leading to a doctor of philosophy degree in Behavioral and Community Health. The proposed change includes adding a course, Applied Research Methods in Behavioral and Community Health (HLTH 712), which would REPLACE our Research Seminar series (HLTH 781, 782, 783) and provide additional application of research methods for our students.

II. RATIONALE

Due to student requests for more statistical application (data analysis) of the concepts covered in our research methods course (HLTH 710 and HLTH 711), we would like to add a course which includes the more statistical application of research methods (e.g., sampling, measurements, design). The course would include use of statistical software packages (e.g., SAS) to apply the concepts covered in the course.

We propose the course be numbered HLTH 712 and be titled, Applied Research Methods in Behavioral and Community Health. HLTH 712 would replace both the students’ research seminar series (HLTH 781/782/783) and their elective in their Advanced Research Methods and Statistics course requirements as to not increase the number of credit hours required for the degree. The research seminar series was very difficult to implement administratively from a faculty teaching load standpoint as well as having only one or two students in each course (either HLTH 781, 782 or 783), yet all together when the course met each week. We believe one 3-credit course will meet the research seminar series objectives as well as the additional statistical application of research methods requested by our students.

III. REQUIREMENTS FOR THE MAJOR

**CURRENT Doctoral Program Courses (74 credits)**

<table>
<thead>
<tr>
<th>Core Courses: (27 credits)</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HLTH 606* Foundations of Public Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 665* Health Behavior I</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 670* Public Health Informatics &amp; Communication</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 710* Methods and Techniques of Research</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 775* Health Education Program Planning &amp; Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EPIB 610* Foundations of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>EPIB 650* Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td>HLSA 601* Introduction to Health Systems</td>
<td>3</td>
</tr>
<tr>
<td>MIEH 600* Foundations of Environmental Health</td>
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**PhD Advanced Theory & Applications: (7 credits)**

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<tr>
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<tbody>
<tr>
<td>HLTH 666P Health Behavior II</td>
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<tr>
<td>HLTH 781 Research Seminar in Public &amp; Community Health</td>
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<tr>
<td>**, *** Elective in Advanced Theory &amp; Applications</td>
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**PhD Advanced Research Methods & Statistics: (13 credits)**

<table>
<thead>
<tr>
<th>PhD Advanced Research Methods &amp; Statistics</th>
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<tbody>
<tr>
<td>HLTH 652P Quantitative Research Methods I in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 653P Quantitative Research Methods II in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 711P Advanced Methods of Research</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 782 Research Seminar in Public &amp; Community Health</td>
<td>1</td>
</tr>
<tr>
<td>**, *** Elective in Advanced Research Methods &amp; Statistics</td>
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**Qualifying Examination**

**Individualized Research Plan: (minimum 15 credits)**

<table>
<thead>
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<tbody>
<tr>
<td>HLTH 783 Research Seminar in Public and Community Health (1 credit)</td>
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<tr>
<td>HLTH 898 Independent Study/Mentored research experience</td>
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<tr>
<td>**, *** Area of concentration (at least two 600+ level courses)</td>
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</tbody>
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**Advance to Candidacy**
Independent Doctoral Dissertation Research: (minimum 12 credits)

HLTH 899 Doctoral Dissertation Research
## PROPOSED Doctoral Program Courses (72 credits)

### Core Courses: (27 credits)

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### PhD Advanced Theory & Applications: (6 credits)

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### PhD Advanced Research Methods & Statistics: (12 credits)

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<tr>
<td>HLTH 711P</td>
<td>Advanced Methods of Research</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 712</td>
<td>Applied Research Methods in BCH</td>
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### Qualifying Examination

### Individualized Research Plan: (minimum 15 credits)

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### Advance to Candidacy

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## IV. TRANSITION TO THE NEW CURRICULUM

Fall 2011 Begin offering HLTH 712

## V. APPENDIX

a. Proposed HLTH 712 syllabus
APPENDIX

Outline of syllabus for HLTH 712, Applied Research Methods in Behavioral and Community Health

COURSE DESCRIPTION:
This course is designed to build on the research skills obtained in 710, Methods and Techniques in Research, and other fundamental research methods and statistics courses. Health education research is defined in this course as research on educational and related processes to improve health of individuals and communities. We will discuss methods and problems that are commonly encountered in health education research, and examine actual research studies. Students will be made aware of complex behavioral research issues and where to go for further information. Students will also examine an existing research data set, develop an analytic plan, and conduct data analysis. It will be assumed that students already have basic computer and statistical skills. Students are encouraged to consult with statistical experts during some phases of the data analysis as the instructor is not a statistician. The course assignments are aimed at helping students gain confidence in their skills regarding written and oral presentation of research design and critique, and data analysis.

COURSE OBJECTIVES:
Upon completion of this course, students will be able to:

1. Use reliable and valid questionnaire design techniques.
2. Test the reliability and validity of multi-item measurements.
3. Conduct a thorough literature review and know its limitations.
4. Propose a research question and hypothesis given a questionnaire and data set.
5. Develop a conceptual model.
6. Apply an appropriate statistical analysis plan.
7. Provide an appropriate interpretation of data analysis

COURSE ASSIGNMENTS:
A. Provide a written critique of an NIH grant proposal. (20 points) This critique of an actual NIH grant proposal will follow actual NIH review guidelines. After completing their own review, students will receive the actual NIH review summary and discuss the proposal in class.

B. Provide a written critique of four research articles (chosen from those designated below with a **) Two critiques must be completed before Spring Break. Reviews must be completed before they are discussed in class. (5 points each, 20 points total)

In three pages, critique the:
   1. Objective of the research
   2. Application of methods and procedures
   3. Application of statistical methods
   4. Logic and soundness of conclusions
   5. Significance to public health and health education

C. Present a lecture on a topic from a research article and lead a discussion to critique a health education research article (20 points) Your lecture will address a designated research article below. You may not lecture on an article for which you are providing a written critique (See B above). This article and lecture date will be assigned during the first two week of class.
   In fifteen minutes, address the following:
      1. Summarize the research question and analysis in the article.
      2. Based on your research, what is new and interesting about the topic of this article?
      3. What do other articles have to say about this topic?
      4. What are the most important things you learned from your research on this topic?
   Lead a discussion for about 30 minutes on the scientific methods in the article.

D. Create a scale and analyze its reliability and validity (20 points)
In about ten double-spaced pages (not including tables and print-outs of your computer syntax), introduce the purpose of your scale and describe your methods, results, and conclusions regarding the reliability and validity of your scale. This must be a referenced paper which defines and describes terms and methods used.
   1. Items and their level of measurement (nominal, ordinal, continuous)
   2. Coding of items
   3. Missing data
   4. Mathematical equations for your multi-item scale score
   5. Item to total correlations
   6. Inter-item correlation matrix
   7. Cronbach alpha
   8. Split-half or Test-Retest analysis
   9. Factor analysis
   10. Convergent and discriminant validity analysis
11. Univariate statistics of your final multi-item scale score
12. Final conceptual description of your scale score

E. Analyze a data set to answer a research question regarding your scale, present the data in tables and figures, and interpret the results
   (20 points)
   This must be a referenced paper which defines and describes terms and methods used.
   In about ten double-spaced pages (not including tables and print-outs of your computer syntax), describe:
   1. A research question
   2. A theoretical model that includes two independent variables and one dependent variable (One of these variables should be your scale)
   3. Your independent and dependent variables
   4. A hypothesis regarding a multivariate model
   5. Selection of statistics
   6. How you handled missing data
   7. Univariate analysis results
   8. Bivariate analysis results
   9. Multivariate analysis results
   10. Interpretation of results