

APPLICATION FOR NEW COURSE

Submitted by College of Public Health Date October 5, 2005

Department/Division offering course Health Behavior

Proposed designation and Bulletin description of this course

a. Prefix and Number CPH 660 b. Title\* GIS Systems and Public Health

\*NOTE: If the title is longer than 24 characters (including spaces), write  
A sensible title (not exceeding 24 characters) for use on transcripts GIS Systems & Public Health

c. Lecture/Discussion hours per week 3 d. Laboratory hours per week 0

e. Studio hours per week 0 f. Credits 3

g. Course description

This course will introduce students to the ArcView Geographic Information System (GIS) to map and spatially analyze public health data.

h. Prerequisites (if any)

Public Health graduate student or permission of instructor

i. May be repeated to a maximum of \_\_\_\_\_ (if applicable)

To be cross-listed as

Prefix and Number

Signature, Chairman, cross-listing department

Effective Date Summer 2006 (semester and year)

Course to be offered  Fall  Spring  Summer

Will the course be offered each year?  Yes  No  
(Explain if not annually)

Why is this course needed?

GIS has numerous applications and provides methods of analyzing the processes that create health patterns. The versatility of GIS in a public health setting involve applications in health marketing, demography, epidemiology, and health care systems. This course provides students with information including the ethics of GIS, manipulation of data, sources of data, and understanding some commonly used public health datasets such as the YRBS, BRFSS, etc. It is a unique course that provides instruction not found in other courses in the curriculum.

a. By whom will the course be taught? Jeff Jones, PhD

b. Are facilities for teaching the course now available?  Yes  No  
If not, what plans have been made for providing them?

### APPLICATION FOR NEW COURSE

10. What enrollment may be reasonably anticipated? 10
11. Will this course serve students in the Department primarily?  Yes  No  
Will it be of service to a significant number of students outside the Department?  
If so, explain.  Yes  No
- 
- Will the course serve as a University Studies Program course?  Yes  No  
If yes, under what Area? \_\_\_\_\_
12. Check the category most applicable to this course  
 traditional; offered in corresponding departments elsewhere;  
 relatively new, now being widely established  
 not yet to be found in many (or any) other universities
13. Is this course applicable to the requirements for at least one degree or certificate at the University of Kentucky?  Yes  No
14. Is this course part of a proposed new program:  
If yes, which?  Yes  No
- 
15. Will adding this course change the degree requirements in one or more programs? \*  
If yes, explain the change(s) below  Yes  No
- 
16. Attach a list of the major teaching objectives of the proposed course and outline and/or reference list to be used.
17. If the course is a 100-200 level course, please submit evidence (e.g., correspondence) that the Community College System has been consulted.
18. Within the Department, who should be contacted for further information about the proposed course?  
Name Jeff Jones Phone 257-5678

\*NOTE: Approval of this course will constitute approval of the program change unless other program modifications are proposed.

APPLICATION FOR NEW COURSE

Signatures of Approval:

CPH Academic Affairs

*R. P. ...*

CPH Faculty Council

*R. Charney*

*Richard R. Clay*

Department Chair

10-5-05

Date

*John Alexander*

Dean of the College

2-27-06

Date

Date of Notice to the Faculty

\*Undergraduate Council

Date

\*University Studies

Date

\*Graduate Council

*T. Smith*

Date

3-22-06

\*Academic Council for the Medical Center

Date

\*Senate Council (Chair)

Date of Notice to University Senate

\*If applicable, as provided by the Rules of the University Senate

ACTION OTHER THAN APPROVAL

University of Kentucky  
Instructor: Jeff Jones, Ph.D.  
Office: UK College of Public Health  
121 Washington Avenue, Suite 109B  
Lexington, KY 40536-0003

SPH 778-020  
First Summer Session 2006  
Room B35, WT Young Library  
Time: Monday through  
Thursday, 2pm -4:30pm  
May 9 – June 6

Office Hours: Please call to set up an appointment  
Phone: 257-5678 x82087  
Email: Jeff.Jones@uky.edu

**SPH 778-020: Special Topics in Public Health  
Geographic Information Systems and Public Health**

Required Texts:

*Getting to Know ArcGIS Desktop*, 2001, Redlands, CA: ESRI Press. by Tim Ormsby, Eileen Napoleon, Robert Burke, Carolyn Groessl, and Laura Feaster  
ISBN: 1879102897

Course Description:

This course will introduce students to the ArcView Geographic Information System (GIS) to map and spatially analyze public health data. While GIS has numerous applications for many disciplines, this course will specifically focus on its uses in public health. Beyond use of GIS for cartography, this course will also examine issues and methods of analyzing the processes creating health patterns. The versatility of GIS in a public health setting will be examined and will include exercises looking at GIS applications involving health marketing, demography, epidemiology, and health care systems. Public health workers who utilize GIS in their research and work have been invited to the class to discuss their 'real world' experiences. Students will be expected to complete a research project involving GIS. It is hoped that this project will compliment or supplement their capstone. Other issues covered in the class will be the ethics of GIS, manipulation of data, sources of data, and understanding some commonly used public health datasets such as the YRBS, BRFSS, etc. The course will also provide an introduction to HTML coding to create simple websites for publishing public health information and maps on the Internet.

Course-Specific Objectives:

- Explain the role of behavioral and social science in public health. Specifically, explore the spatial components of public health.
- Discuss the relationship of women's health, health disparities, early childhood issues, and the current political climate to health in Kentucky and the US. Specifically, how to utilize the synoptic viewpoint of spatial analysis to define and explore epidemiological, administrative, legal, and behavioral aspects of health and health access.
- Describe the role that gender, race, and social class play in the utilization of health promotion resources. Specifically, how do identities manifest themselves spatially and contribute to disparities in access.
- Contrast effective techniques to measure health behavior understand the role of public health in society. Specifically, learn to utilize GIS as another tool available to the public health practitioner.
- Public policies operate within spatially bound jurisdictions. This class explores how the boundaries between differing policies (ex. the county line between wet/dry counties) and the distance effects of access points to health care (ex. distance to oncology centers) influence individual and community health.
- Explore how GIS as a tool can be used within epidemiology, health services, biostatistics, gerontology, and health behavior.

- Apply GIS to ecological modeling of health via tools to highlight patterns among diverse data.

Method of Teaching:

Lecture, discussion, and computer laboratory

Course Requirements:

- 5 exercises (100 points total, 20 points each)
- Research Project
  - Atlas (60 points)
  - Presentation (20 points)
  - Website (20 points)

Attendance Policy:

Students are expected to attend every class meeting. No make-up examinations will be given without documentation by physician or university office authorizing absence. Make-up exams are generally essay and short answer. Examinations may be given at other times than those scheduled in extreme circumstances at the discretion of the professor in PRIOR consultation with the student. Attendance will not be formally taken. Good final grades, however, have been found to correlate highly with attendance.

Accommodations:

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center ([www.uky.edu/TLC/grants/uk\\_ed/services/drc.html](http://www.uky.edu/TLC/grants/uk_ed/services/drc.html)). If you have not already done so, please register with the Disability Resource Center (Room 2 Alumni Gym, 257-2754, [jkarnes@uky.edu](mailto:jkarnes@uky.edu)) for coordination of campus disability services available to students with disabilities.

Academic Honesty: The Department of Health Behavior, the College of Public Health, and the University of Kentucky place a premium on academic honesty. Please refer to the University of Kentucky Student Rights and Responsibilities document ([www.uky.edu/StudentAffairs/Code/part2.html](http://www.uky.edu/StudentAffairs/Code/part2.html)).

Provisionality: I reserve the right to clarify or amend these policies, in which case I will document the clarification or amendment by distributing an addendum to this document.

Grading:

90-100 = A
80-89 = B
<80 = C

Grades are cumulative based on a total point system.

Course Outline:

The following are exam dates; adjustments may be made.

- Introduction
  - Basics of Cartography
  - Geographic/Spatial Analysis vs. Cartography
  - Limits of Data
  - GIS Terminology
- Exercise 1, Cognitive Mapping due
  - Cognitive Mapping, Health Behavior, and Health Marketing
  - Common Sources of Data
  - Understanding These Datasets
  - Costs of Setting Up a GIS System for Your Health Department or Agency
  - Small Area Analysis
  - Learning ArcView GIS

- 3
  - Exercise 2, Research Project Outline and Abstract due
  - Speaker: Dr. Claudia Hopenhayn and Jay Christian, Linking Health Behavior and Disease Outcomes via GIS
  - Learning ArcView GIS
- 4
  - Learning ArcView GIS
- 5
  - Exercise 3, Initial Maps due
  - GIS and Creating New Shapefiles
  - Plotters and Producing Quality Maps
  - Speaker: Dick Gilbreath, Tour of UK Geography Department Cartography Lab
- 6
  - Exercise 4 due
  - GIS and Environmental Health
  - GIS and Chronic Disease
  - Multivariate Layering
  - Emergency Responders and GIS
  - GIS and Time Series
  - Ethics and GIS
- 7
  - Exercise 5 due
  - Introduction to HTML
  - Speaker: Neal Rosenblatt, KY Cabinet For Health & Family Services
- 8
  - HTML
- 9
  - More Advanced HTML and GIS
  - Speaker: John Williams, SQL and server-side management of GIS products
- 10
  - Final Presentations
- 11
  - Final Presentations

IF YOU ARE HAVING TROUBLE WITH A CONCEPT OR SOME OTHER CLASS-RELATED PROBLEM, PLEASE COME SEE ME AFTER CLASS OR AT MY OFFICE. CALLING IS FINE TOO.

Per University policy, if you will need to be absent from class for team events, family issues, or religious holidays not already covered by UK's vacation calendar, please let me know at least two weeks in advance in-writing.

UNIVERSITY OF KENTUCKY  
HEALTH CARE COLLEGES COUNCIL

Date March 21, 2005

MINUTES: Health Care Colleges Council

PRESIDING: Dave Watt

MEMBERS

PRESENT: Kristin Ashford, Jennifer Brueckner, Paul Bummer, Karen Butler, Susan Effgen\*,  
Paul Kearney, Debbie Kelly, Robert Kuhn, Karen Novak, Bill Pfeifle, Geza Bruckner\*

MEMBERS

ABSENT: Chris Herren, Janice Kuperstein, Judith Lesnaw

OTHERS

PRESENT: Jeff Jones, Jim Lindsay, Melanie Hardin-Pierce, Marcia Stanhope, Sharon Stewart,

Dave Watt called the meeting to order at 4:00 p.m.

Approval of February 21th Minutes as circulated

Submitted by the College of Public Health

Jeff Jones, in the College of Public Health, gave the Council background and an overview of the proposal requesting New Course CPH 660 "GIS Systems and Public Health."

The reviewer was Robert Kuhn

**ACTION:** It was moved by Robert Kuhn, duly seconded by Karen Novak, and unanimously carried, that the proposal **New Course CPH 660**, be approved, and forwarded to the Graduate Council for approval.

\* Alternate Member

Submitted by the College of Nursing

Julie Sebastian, Melanie Hardin-Pierce, and Marcia Stanhope in the College of Nursing, gave the Council background and an overview of the proposal requesting a New Track: MS Track "Clinical Nurse Leader" (CNL).

The reviewer was Karen Novak.

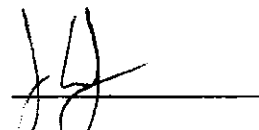
DISCUSSION: Robert Kuhn brought to the Council's attention that this proposal is a pilot program and inquired if the program proposal ought to be re-visited after a three year period. The Council agreed that an amendment be added that *the program be re-visited/reviewed after three years.*

ACTION: It was moved by Karen Novak, duly seconded by Paul Kearney, and unanimously carried, that the proposal to Request a **New Track: MS Track "Clinical Nurse Leader"**, be approved with an amendment and forwarded to the Graduate Council Office for approval.

Adjournment

There being no further items for discussion, the meeting was adjourned at 4:30 PM

Respectfully submitted:

  
\_\_\_\_\_  
Jim Lindsay  
3/22/06





UNIVERSITY OF KENTUCKY

**College of Public Health**

*Office of the Dean*

*121 Washington Ave., Suite 112*

*Lexington, KY 40536-0003*


*(859) 257-5678 Ext. 82247*

*Fax: (859) 323-5698*

*<http://www.mc.uky.edu/PublicHealth>*

**MEMORANDUM**

**TO: Health Care Colleges Council**

**FROM: Linda A. Alexander, EdD**   
**Associate Dean for Academic Affairs**

**SUBJECT: Proposal for CPH 660 GIS Systems & Public Health**

**DATE: February 27, 2006**

It is the intention of the Department of Health Behavior in the College of Public Health to formally establish a course to teach students in the MPH degree program about the usefulness of geographical systems when studying public health or establishing connections between geography and public health outcomes. Other components of the course include ethics, health marketing, demography, epidemiology, manipulating data, and understanding datasets. The course has been taught on one previous occasion, Summer 2005, and was very well received by students. It is being taught again in the Fall of 2006.

This course proposal has been 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 course director, Dr. Jeff Jones, via phone at 7-5678 ext 82087 or via email at [jeff.jones@uky.edu](mailto:jeff.jones@uky.edu).

**UNIVERSITY SENATE REVIEW AND CONSULTATION SUMMARY SHEET** RECEIVED MAR 2 2 2006

**Proposal Title:** CPH 660 GIS Systems & Public Health (College of Public Health)  
**Name/email/phone for proposal contact:** Dr. Jeff Jones 7-5678 ext 82087

**Instruction:** To facilitate the processing of this proposal please identify the groups or individuals reviewing the proposal, identify a contact person for each entry, provide the consequences of the review (specifically, approval, rejection, no decision and vote outcome, if any) and please attach a copy of any report or memorandum developed with comments on this proposal.

Reviewed by: (Chairs, Directors, Faculty Groups, Faculty Councils, Committees, etc)	Contact person Name (phone/email)	Consequences of Review:	Date of Proposal Review	Review Summary Attached? (yes or no)
Academic Affairs Committee	Rick Crosby	approved	12/6/05	yes
Faculty Council	Pam Leaster	approved	2/14/06	yes
Assoc Dean for Academic Affairs	Lenita Alexander	approved	2/27/06	yes

**RECEIVED MAR 22 2006**

**Hinson, Kristine L**

**From:** Lindsay, Jim D.  
**Sent:** Wednesday, March 22, 2006 11:30 AM  
**To:** Nikou, Roshan ; Blackwell, Jeannine  
**Cc:** Brothers, Sheila C; Watt, David; Flanagan, Rebecca; Jones, Jeff A  
**Subject:** HCCC Transmittal - MS in Athletic Training

March 22, 2006

**T R A N S M I T T A L**

**TO:** Jeannine Blackwell and Roshan Nikou  
Graduate Council  
**FROM:** Jim Lindsay  
Health Care Colleges Council

At its meeting on March 21, 2006, the Health Care Colleges Council approved and recommends approval of the following by the Graduate Council:

College of Public Health

New Course - CPH 660

Attached are minutes and the materials to implement these requested actions.

/jl

**Attachments**

**cc:** Rebecca Flanagan  
Jeff Jones  
Dave Watt  
Sheila Brothers

**Jim Lindsay**  
Health Care Colleges Council Coordinator  
Office of the Associate Provost for Academic Affairs  
University of Kentucky  
BBSRB 741 S. Limestone  
Lexington, KY 40536-0509  
(895) 323.6638  
jdlind2@email.uky.edu

3/23/2006

## Nikou, Roshan

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**From:** Graduate.Council.Web.Site@www.uky.edu  
**Sent:** Monday, April 24, 2006 12:06 PM  
**To:** Nikou, Roshan  
**Cc:** Lyons, Marilyn  
**Subject:** Investigator Report

AnyForm User: www.uky.edu  
AnyForm Document: <http://www.rgs.uky.edu/gs/GCInvestigatorReport.html>  
AnyForm Server: www.uky.edu (/www/htdocs/AnyFormTurbo/AnyForm.php)

College/Department/Unit: = NUR 604

Category: = Change

Date\_for\_Council\_Review: =

Recommendation\_is: = Approve

Consent\_Agenda: = YES

Investigator: = W. W. Witt

E-mail\_Address = wwitt@uky.edu

1\_\_Modifications: = This course was changed from a 3 credit to a 2 or 3 credit course to allow students in Clinical Nurse Leader(CNL) pilot program to receive 2 credits. This seems to be a straightforward change that will be beneficial to students in the CNL program. Students receiving 2 credits will complete 4 of the 6 modules in the class while those receiving 3 credits will complete all 6 modules.

2\_\_Considerations: =

3\_\_Contacts: = Dr. Julie Sebastian and I have played phone tag for several days--both of us were out of office a lot. I have emailed her today (she is out of town) but have not heard from her.

4\_\_Additional\_Information: = I believe this change is worthy and should be approved. My attempts to contact her were to confirm the need for this course.

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AnyForm/PHP3 0.1

AnyFormRandomSeqNo: 84959642