10. enrollment the last two summers was about 20 each time

Everything noted here was discussed with Dr. Jeff Jones and he approved of all changes.
2. Considerations: The course has been taught twice now - both times with about 20 students. The feedback has been positive. There are currently lots of jobs in epidemiology that require GIS skills and this is an important training.

3. Contacts: The accompanying syllabus was copied from a template and contained numerous errors. We discussed these and Dr. Jones clarified a few points:

   There are not any exams so all references to exams need to be removed.
   Under grading: 70-79 = C; under 70 E
   Most of the course grade is related to projects. Since this has been taught as an intensive summer course, projects are due every 2-3 days.

4. Additional Information: The course certainly seems to fill an appropriate need and appears acceptable. The only real concern I had was with the poorly structured syllabus which did not appear consistent with the other information.

--

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APPLICATION FOR NEW COURSE

1. Submitted by College of Public Health ___________________________ Date October 5, 2005

Department/Division offering course Health Behavior ___________________________

2. 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)

4. To be cross-listed as

   Prefix and Number ___________________________ Signature, Chairman, cross-listing department

5. Effective Date Summer 2006 (semester and year)

6. Course to be offered □ Fall □ Spring X Summer

7. Will the course be offered each year? X Yes □ No

   (Explain if not annually)

8. 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.

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

   b. Are facilities for teaching the course now available? X 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? X Yes □ No

Will it be of service to a significant number of students outside the Department? □ Yes X No
If so, explain.

Will the course serve as a University Studies Program course? □ Yes X No
If yes, under what Area?

12. Check the category most applicable to this course

□ traditional; offered in corresponding departments elsewhere;

X 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 X No

14. Is this course part of a proposed new program:
If yes, which? □ Yes X No

15. Will adding this course change the degree requirements in one or more programs?* □ Yes X No
If yes, explain the change(s) below

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:

Richard R. Clayton
Department Chair

Dean of the College

CPH Academic Affairs

CPH Faculty Council

10-5-05
Date

2-27-06
Date

Date of Notice to the Faculty

*Undergraduate Council

*University Studies

J. Blackwell
Graduate Council

*Academic Council for the Medical Center

*Senate Council (Chair)

*if applicable, as provided by the Rules of the University Senate

Date of Notice to University Senate

ACTION OTHER THAN APPROVAL
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.
UNIVERSITY SENATE REVIEW AND CONSULTATION SUMMARY SHEET

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.

<table>
<thead>
<tr>
<th>Reviewed by: (Chairs, Directors, Faculty Groups, Faculty Councils, Committees, etc)</th>
<th>Contact person Name (phone/email)</th>
<th>Consequences of Review:</th>
<th>Date of Proposal Review</th>
<th>Review Summary Attached? (yes or no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Affairs Committee</td>
<td>Rick Crosby</td>
<td>approved</td>
<td>1/26/05</td>
<td>yes</td>
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<tr>
<td>Faculty Council</td>
<td>Pam Leaster</td>
<td>approved</td>
<td>2/24/05</td>
<td>yes</td>
</tr>
<tr>
<td>Assoc Dean for Academic Affairs</td>
<td>Linda Alexander</td>
<td>approved</td>
<td>2/27/06</td>
<td>yes</td>
</tr>
</tbody>
</table>
SPH 778-020: Special Topics in Public Health
Geographic Information Systems and Public Health

Required Texts:

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 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:
a. 5 exercises (100 points total, 20 points each)
b. 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). If you have not already done so, please register with the Disability Resource Center (Room 2 Alumni Gym, 257-2754, 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).

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.

1
   ▪ Introduction
   ▪ Basics of Cartography
   ▪ Geographic/Spatial Analysis vs. Cartography
   ▪ Limits of Data
   ▪ GIS Terminology

2
   ▪ 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.