University of Maryland, College Park
Department of Public and Community Health

HLTH 688 W Information Management for Public Health Professionals

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Semester: Summer (beginning in 6/12), 2006

OFFICE HOURS

Monday – 17:00-20:00
Tuesday – 17:00-20:00
Wednesday – 9:00-17:00

WebCT Time: The curriculum is on WebCT at all time. Please complete course assignments as specified in the week.

Required Textbooks & Other Readings	**Required:** *Patrick W. O'Carroll, William A. Yasnoff, M. Elizabeth Ward* et al (eds). Public Health Informatics and Information Systems. Health Informatics series. *Springer* Publishing. January 2003. ISBN: 0387954740. Alan Melnick. Introduction to Geographic Information Systems in Public Health. ISBN: 083421878X. Jones and Bartlett Publishers. *2002.*
Course Description	Health information management is concerned with the collection, storage, presentation and interpretation of health data. This curriculum covers concepts, case study, and applications of informatics in health care and public health. The main focus is on the application of technology, with a particular emphasis on the public context of health management. The emphasis is on both system applications and a deeper level of engagement on evaluation. It is designed to introduce students to core emerging information systems that have potential to enhance the effectiveness and efficiency of health delivery. Each module consists of several book chapters or research articles to help students understand core concepts and practice in health informatics. Students are required to complete quiz or essay questions after each class. Students will also expect to submit a project proposal that demonstrates competencies of public health informatics practice.
Course Objectives	At the conclusion of this course, the student will be able to: (1) Demonstrate proficiency in using Web-based data applications. (2) Demonstrate the ability to describe the core components of information systems (3) Successfully demonstrate the use of informatics to improve organizational communication and operation in health environments. (4) Propose to implement at least one core application to facilitate the operation of a public health information system for public health professionals. (5) Identify emerging health information systems that maximize health output.

Course Policies	Missed quiz or essay question assignments: You are our greatest class resource. Your thoughts, ideas, questions and comments will enrich everyone's learning experience, so please be actively involved in class. Enthusiastic online discussions are welcome! Come to class prepared by reading the text and articles of each online module. If you cannot complete the course requirement, or if you are ill or encountering personal difficulties, please call or email to the instructor as soon as possible. You can also contact the Learning Assistance Service (301-314-7693) and or the Counseling Center (301-314-7651). If you are unable to be in class on the day of a class or an assignment, please discuss this with the instructor BEFORE the actual week of the class or assignment. Accommodations for students with disabilities: If you have a documented disability and wish to discuss academic accommodations for class requirements or other needs, please talk to/email the instructor as soon as possible. You will need documentation from Disability Support Service (314-7682.) If you intend to take any or all exams at DSS it is your responsibility to notify me as soon as possible. Academic Integrity: The University's code of academic integrity is designed to ensure that the principle of academic honesty is upheld. Any of the following acts, when committed by a student, shall constitute academic dishonesty: ✓ CHEATING : intentionally using or attempting to use unauthorized materials, information, or study aids in an academic exercise. ✓ FABRICATION: intentional and unauthorized falsification or invention of any information or citation in an academic exercise. ✓ FACILITATING ACADEMIC DISHONESTY: intentionally or knowingly helping or attempting to help another to violate any provision of this code. ✓ PLAGIARISM: intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise. For more information see: http://www.inform.umd.edu/CampusInfo/Departments/PRES/policies/iii100a.html Religious Observances: The University System of Maryland policy provides that students *should not be penalized because of observances of their religious beliefs; students shall be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment that is missed due to individual participation in religious observances.* **It is the student's responsibility to inform the instructor in advance of any intended absences for religious observance.**

Information Management
for Public Health Professionals
- S y l l a b u s -

Week 1 **Week of 6/12**	Topic: Introduction: Course Outline. An overview of major concept and practice of health information systems for public health professionals. • Library Resources: Introduce UMCP research resources available for conducting research in public health information systems. Required Reading / Assignment: : **Chapter. 4: The Governmental and Legislative Context of Informatics.**
Week 2 **Week of 6/19**	Topic: Public Health Informatics and Health Organizations Required Reading / Assignment: **Chapter. 9 Public Health Informatics and Organizational Change.**
Week 3 **Week of 6/26**	Topic: Privacy and Confidentiality of Health Informatics Required Reading / Assignment: **Chapter 10. Privacy, Confidentiality, and Security of Public Health Information.**
Week 4. **Week of 7/03**	Topic: Ethnic Dimension and Health Informatics Required Reading / Assignment: **Chapter. 13 Ethics, Information Technology, and Public Health: Duties and Challenges in Computational Epidemiology.**
Week 5. **Week of 7/10**	Topic: Primary Care and Health Informatics Required Reading / Assignment: **Chapter. 24 Promoting the Delivery of Preventive Medicine in Primary Care.** Project proposal due.
Week 6 **Week of 7/17**	Topic: Application Development Required Reading / Assignment: **Chapter. 25 Policy Issues in Developing Information Systems for Public Health Surveillance of Communicable Diseases.**
Week 7 **Week of 7/24**	Topic: Health Information Systems Toolbox Required Reading / Assignment: **Chapter 29 Using Information Systems to Build Capacity: A Public Health Improvement Tool Box.**
Week 8 **Week of 7/31**	Topic: Health Informatics and Policy Required Reading / Assignment**: Chapter. 30 Using Data to Meet a Policy Objective: Community Health Assessment Practice with the CATCH Data Warehouse.**
Week 9 **Week of 8/7**	Topic: Application: An Integrated Public Health Surveillance System Required Reading / Assignment: **Chapter. 32 Case Study: An Immunization Data Collection System for Private Providers**
Week 10 **Week of 8/14**	Topic: Application: Information Systems and National Nutrition Surveillance Required Reading / Assignment: **Chapter 33. Public Health Informatics in the National Health and Nutrition Examination Survey**

Grading					
190-200 points	A+	180-189 points	A	170-179 points	A-
160-169 points	B+	150-159 points	B	140- 149 points	B-
130-139 points	C+	120-129 points	C	110-119 points	C-
109 & below	F				

Course Requirements and Grades:
Grades will be based on the following criteria:

1) Module assignments: Quiz and Essay Questions (90 points),

2) Project proposal (50 points),

3) a final, full concept paper of health information systems (60 points).

Final grade: A letter grade will be assigned to as a final grade according to the aforementioned grading rules. Attendance is expected and 20 points will be docked per assignment missed if a student misses more than 2 class assignments without advanced notice and/or due justifications (as explained in the *"course policies"* section). A 10% penalty will be assessed against late submitted assignment. Final paper should be developed by individual student, and the paper should not duplicate the contents submitted for other courses.

Project proposals are expected to be no more than 3 pages, and full concept papers are expected to be no more than 20 pages, and should utilize concepts acquired in this course. Written assignments are expected to be proofread before submission for a grade. Papers with excessive typos/grammar errors may not be graded. Potential topics should be discussed with the instructor. Examples of topics may include but are not limited to the following areas: hospital information systems, telemedicine, clinical decision-support systems, computer-based patient records, GIS applications in health, and community health info systems.

Final project: A concept paper for public health information Implementation

Students are expected to prepare a health informatics business plan outlining the use of a particular technology within a (public) health organization. A sample concept paper will be provided. This business plan assignment shall at least address the following questions:

1) What is the type of technology or innovation being considered?
2) What is the background of the health organization that uses this technology?
3) How does this technology fit in the overall strategic plan of the organization? How does the business plan relate to the concept or theory introduced in class?
4) How will the plan be implemented?
5) A "Strength, Weakness, Opportunity and Challenge" (SWOC) analysis.

This assignment will be completed in two phases:
Assignment 1: Proposal - 3 pages maximum due at the end of Week 5. 50 points.
Assignment 2: Concept paper. Less than 20 pages. Due one week before class ends: 60 points. Due at the end of the last week.

Competencies
This course most closely relates to the following competency criteria of ***community health education*** graduate programs
1. Collection, storage, retrieval, analysis and interpretation of health data;
2. Planning, organization, administration, management, and evaluation of health info systems;
3. Describe and analyze the distributions and determinants of disease.
In overall, the course provide an opportunity for students to understand community health analysis, with special reference to community description, analysis of communication pathways, coordinating provision of health education services, and roles of institutions in relation to learning and the behavioral change process.