

UNC Gillings School of Global Public Health  
Department of Health Policy and Management  
HPM 778 (1.5 credit hours) Fall 2018  
Public Health Information and Quality Applications

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Instructor: Amy Ising, MSIS (office hours per appointment)  
E-mail: [ising@ad.unc.edu](mailto:ising@ad.unc.edu)  
Online Meeting Times: Wednesdays, 7:00pm-8:30pm

**Description:** This course provides students with an overview of the concept, science, application, and significance of public health informatics. The course will include in-depth discussions on prevailing governmental public health information systems in use today and their roles within the broader health care system. Students will discuss the communication, analytical, technical and innovative thinking skills needed to contribute to the effective use of information in public health settings.

### **Honor Code**

The principles of academic honesty, integrity, and responsible citizenship govern the performance of all academic work and student conduct at the University as they have during the long life of this institution. Your acceptance of enrollment in the University presupposes a commitment to the principles embodied in the Code of Student Conduct and a respect for this most significant Carolina tradition. Your reward is in the practice of these principles.

Your participation in this course comes with the expectation that your work will be completed in full observance of the Honor Code. Academic dishonesty in any form is unacceptable, because any breach in academic integrity, however small, strikes destructively at the University's life and work.

If you have any questions about your responsibility or the responsibility of faculty members under the Honor Code, please consult with someone in either the Office of the Student Attorney General (966-4084) or the Office of the Dean of Students (966-4042).

**Student Expectations: Students are expected to adhere to UNC Chapel Hill's student code:**  
<https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf>

### **Recognizing, Valuing, and Encouraging Diversity:**

The importance of diversity is recognized in the mission statement of HPM. In the classroom, diversity *strengthens* the products, *enriches* the learning, and *broadens* the perspectives of all in the class. Diversity requires an atmosphere of inclusion and tolerance, which oftentimes challenges our own closely-held ideas, as well as our personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment. This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.

Diversity includes consideration of: (1) life experiences, including type, variety, uniqueness, duration, personal values, political viewpoints, and intensity; and (2) factors related to "diversity of presence," including, among others, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation, social position, and veteran status.

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<i>Course Learning Objective</i>	<i>HPM Competencies</i>
Students will learn the basic vocabulary and perceptions surrounding public health informatics.	Analytical Thinking Information Technology
Students will understand how organizational structures impact public health informatics as well as approaches to addressing resulting challenges and barriers	Political Savvy Information Technology Systems Thinking
Students will examine state, regional and local informatics structures designed to improve public health	Analytical thinking Accountability Information Technology

**Overall Course Objectives:**

Upon completion of this course, successful students will be prepared to:

- Define public health informatics and describe how it differs from and interacts with other informatics disciplines
- Understand the role of public health informatics in performing public health core functions and essential services in clinical, environmental and population health at local, state and federal levels
- Describe major public health data sources, major public health surveillance systems and know the process and challenges of implementing, maintaining and managing a public health information system
- Understand the role of privacy, security, and confidentiality in system development
- Described major federal health IT initiatives and how they impact public health information systems.

**Disability Accommodation**

UNC-CH supports all reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability, or a pregnancy complication resulting in difficulties with accessing learning opportunities.

All accommodations are coordinated through the UNC Office of Accessibility Resources & Services (ARS), <http://accessibility.unc.edu>; phone 919-962-8300 or email [accessibility@unc.edu](mailto:accessibility@unc.edu). Students must document/register their need for accommodations with ARS before any accommodations can be implemented.

**Required Text and Journal Articles:** Required and optional journal articles will be posted on Sakai. Students should read all required articles prior to the class where that topic is covered.

- Required textbook: J.A. Magnuson • Paul C. Fu, Jr. Editors; **Public Health Informatics and Information Systems**; Second Edition (electronic copy will be posted in Sakai site)

**Pre-requisite Courses:** None

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**Course Evaluation:**

HPM participates in the UNC-CH's online course evaluation system, enabled at the end of the semester by Scantron Class Climate. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment.

**Evaluation/Grading:**

<b>Component</b>	<b>% of Grade</b>
Brief Reading Summary / Critique / Discussion Questions Posted to Sakai	15%
Sakai Discussion Forum Participation & Class Attendance	25%
Review of a peer-reviewed manuscript on a public health informatics topic	30%
Final Individual Lightning Talk	30%

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**Schedule & Topics**

Class #	Date	Contact Hours	Topic & Details: For all weeks, see Sakai for readings and assignments (if applicable) for each topic.
1	8/15/2018	5	<ul style="list-style-type: none"> <li>• Course Overview</li> <li>• Public Health Informatics</li> <li>• Surveillance overview</li> </ul>
2	9/5/18	1.5	<ul style="list-style-type: none"> <li>• Data Standards               <ul style="list-style-type: none"> <li>○ Skim Data Standards Chapter in Clinical Informatics Book (pp. 233-253)</li> <li>○ Get i2b2 training</li> </ul> </li> </ul>
3	9/12/18	1.5	<ul style="list-style-type: none"> <li>• Health Information Exchange               <ul style="list-style-type: none"> <li>○ Read Magnus</li> <li>○ Read Dixon</li> </ul> </li> </ul>
4	9/26/18	1.5	<ul style="list-style-type: none"> <li>• Public Health 3.0 (combining clinical data with personal data, e.g. where you live &amp; social determinants to determine health risks more accurately...)               <ul style="list-style-type: none"> <li>○ Read Berkowitz</li> <li>○ Read DeSalvo</li> <li>○ Read Cantor &amp; Thorpe</li> </ul> </li> </ul>
5	10/17/18	1.5	<ul style="list-style-type: none"> <li>• Informatics highlights: visualization and usability best practices               <ul style="list-style-type: none"> <li>○ Read Chapter 8 of <a href="http://inspiredehrs.org/Inspired_EHRs_Designing_for_Clinicians.pdf">http://inspiredehrs.org/Inspired_EHRs_Designing_for_Clinicians.pdf</a></li> <li>○ Read Brooks</li> </ul> </li> </ul>
6	10/24/18	1.5	<ul style="list-style-type: none"> <li>• Prescription Drug Monitoring Programs and informatics related to the opioid crisis               <ul style="list-style-type: none"> <li>○ Read Beletsky</li> </ul> </li> </ul>
7	11/7/18	1.5	<ul style="list-style-type: none"> <li>• Public health Informatics in the global setting / International Health Regulations &amp; Global Surveillance Initiatives               <ul style="list-style-type: none"> <li>○ Read Aranda-Jan</li> </ul> </li> </ul>
8	11/14/18	1.5	<ul style="list-style-type: none"> <li>• Population Health Management               <ul style="list-style-type: none"> <li>○ Read Rabinowitz</li> <li>○ Read Steenkamer</li> </ul> </li> </ul>
9	11/28/18	1.5	<ul style="list-style-type: none"> <li>• TBD</li> </ul>

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10	12/8/2018 OR 12/9/2018	1.5	On Campus Lightning Talks