Course Profile: Health Informatics

Course Number: INF 7620

Credits: 3

MLIS Prerequisite(s): INF 6010 and INF 6080
MSIM Co-requisite(s): INF 6000

Rationale for Inclusion in Curriculum:

This course introduces students to rapidly expanding areas in informatics research and practice in various health contexts. In this course, students will become familiar with a range of emerging technologies in health and research-intensive environments from an interdisciplinary perspective. The course covers tools for public health disease monitoring and surveillance, including digital tools for pandemics. In addition, consumer health technologies such as mobile apps, wearable sensors, and interactive health games will be explored. Further, the potential benefits, challenges, and ethical issues of “Big Data” in healthcare will be investigated. We will also examine the implications of various research data policies at local and national levels. Overall, the course incorporates the latest ideas, technologies, theories, and principles of evidence-based practice to prepare students for career opportunities in the public, non-profit, and private sectors.

Learning Outcomes:

By the end of this course students will be able to:

1. Examine the impact of emerging technologies on healthcare decision-making, patient self-management, and health information management.
2. Analyze the changing relationships between healthcare consumers and health professionals because of various technologies.
3. Apply principles of evidence-based practice in selecting health information technologies for target populations and scenarios.
4. Compare and evaluate available health information technologies (e.g. mobile apps, wearables, interactive health games, etc.) to help address health disparities.
5. Analyze the ethical and privacy issues related to “Big Data” in healthcare.
6. Examine issues related to working with research data: life cycle of data, research data outputs, data management skills, and the implications of various research data policies.

Course Methodology:

Lectures, readings, class discussions, presentations, guest speaker(s).
Bases for Evaluation of Student Performance:

Evaluation may consist of the following:

- Research papers
- Examinations
- Presentations
- Participation/discussion

Text: To Be Determined

Approved: 3/12
Updated: 11/20