Course Syllabus : Contextual factors and Health information systems

Instructor's Name:	
Date:	
Place:	
Contact Information:	
Office Hours:	

I. Course Description

This course introduces to the students the basic concepts related to the health information system in health care. It provides the students with an understanding of health information system use and its performance in health care system. It describes the tools and processes for collecting, storing, and retrieving health care data. In this course, accurate sources of health information in health care will be tought and identified. Emphasis will be placed on web-based applications of health information system and electronic health records. In addition; the course will clarify the essential tools methods for monitoring and evaluation of the information system and the contextual factors influencing health information system as well.

II. Student Performance Objectives

Upon the completion of this course, the students will be able to
1. Describe the basic concepts, components and processes related to the health information systems.
2. Apply modern technology in data collection, storage, analysis, and reporting of information in health care.
3. Distinguish the various types of healthcare information, including knowledge, data, sources, processes and standards.
4. Propose, develop and evaluate studies of health information using Excel and Access

5. Identify the contextual factors influencing the country health information systems

6. Utilize intranet and web-based applications to facilitate the electronic health record, personal health records, public health, and other administrative applications.

7. Identify the criteria and methods for assessing country health information system performance.

8. Develop teamwork skills to mediate the communication between healthcare professionals and information technology personnel.

9. Apply confidentiality and security measures to protect electronic health information.

10. Use electronic health record technology to collect, store and analyze health related data to be used in health care practice and research.

11. Participate in the planning, design, selection, implementation, integration, testing, evaluation, and support for organization-wide information systems.

III. Evaluation and Requirements:

Attendance Policy

Students have to attend all classes, except in However, they are allowed to be absent according to the university regulations (6 hours) during the semester.

Grade Determination:

Grading Scale:

90 - 100	**Excellent**
80 – 89	**Very good**
70 – 79	**Good**
65 – 69	**Fair**
Below 65	**Fail**

Gradable Content:

Content	Grade
Project	30%
Assignments	10%
Mid-term Exam	20%
Final exam	40%
Total	100%

IV. Instructional Materials:

- Text book

Magnuson, J., Paul, C. (2014). Public Health Informatics and Information Systems, 2nd Edition. Springer. Verlag London.

- Handouts
- Videos
- Computer applications (Excell and Access)
- Internet applications

V. Weekly Class Schedule:

Below are a daily basis of topical areas which will be covered in the course, included scheduled assignments, quizzes, tests, final exam date, etc.

Week	Topic
1st Weeek	- Basic concepts of health information system (HIS) - Components and processes of HIS
2nd Week	- Data collection - Data storage - Data analysis - Reporting of HIS
3d Week	**Quiz (1)** - Types of healthcare information
4th Week	Sources of information in the country

5th Week	▪ Core indicators for country HIS performance
6th Week	▪ Health information using Excel ▪ Health information using Access
7th Week	▪ **Mid-term Exam** ▪ Current and emerging use of clinical information systems
8th Week	▪ **Project Assignment** ▪ Quality of health care data, regulations and standards
9th Week	▪ Intranet and web-based applications ▪ Electronic health record ▪ Personal health records ▪ Public health applications
10th Week	▪ **Quiz (2)** ▪ Designing and implementation organization-wide information systems
11th Week	▪ Confidentiality and security measures of data
12th Week	▪ Collection, storage and analysis of health related data in health care practice and research
13th Week	▪ **Quiz (3)** ▪ Criteria and methods for assessing HIS performance
14th Week	▪ Contextual factors influencing the country health information systems
15th Week	▪ **Final exam**

VI. Final Exam

Final exam will comprise 40% of the total grade. The final exam will comprise multi types of questions such as MCQs, discussion questions, case studies and practical exam. The practical examination will test the student ability to apply what has been tought during sesions included the use and application of Excell program in managing HIS

VII.   Further Readings (Recommended Literature)

Wager, K., Lee, F., Glaser, J. (2009). Health Care Information Systems A Practical Approach For Health Care Management. 2nd edition. Wiley & Sons. USA

Buntin, M. B., et al. "The Benefits Of Health Information Technology: A Review Of The Recent Literature Shows Predominantly Positive Results." Health Affairs 30, no. 3 (2011): 464–71.

Marczak, J., et al. "Addressing Systemic Challenges to Social Inclusion in Health Care: Initiatives of the Private Sector."(PDF) Americas Society. Whitepaper, March 7, 2011

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