

**JOLIET JUNIOR COLLEGE
DEPARTMENT OF COMPUTER INFORMATION
AND OFFICE SYSTEMS**

COURSE SYLLABUS

Course Prefix and Number	HIM 222
Course Title	Computers in Healthcare
Curriculum	Computer Information & Office Systems
Lecture	4
Lab	0
Credit Hours	4
Prerequisites	HIM 102, and HIM 125, and HIM 210, and HIM 220, and CIS 122 and OFS 114.

Catalog Description

Information Technology for the Health Professions provides a general introduction to computer literacy and information technology for health care students. The course provides a comprehensive survey of the interconnections of information technology (IT) and health care. The class teaches computer literacy and introduces students to the uses of information technology in health care delivery. It includes discussions of hardware and software, communications and networking, ethical issues, and privacy concerns. In addition, it discusses how IT is transforming every aspect of health care—from administrative applications (such as the electronic medical record), to clinical systems involved in direct patient care, to special-purpose applications (such as simulation software used in the education of health care professionals).The class examines the impact of IT on health care—specifically in the fields of radiology, telemedicine, surgery, medical devices, pharmacy, dentistry, and informational resources.

Course Objectives: See attached.

Prepared by:

Reviewed by:

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4/09Revised 9/09

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Department Chairperson Date

Revised 6/11

STUDENT MATERIALS

A. Textbook:

Title: Electronic Health Records, Understanding and Using Computerized Medical Records Textbook and MEDCIN Software

Author: Richard Gartee

Publisher: Prentice Hall

AND

Title: Case Studies in Health Information Management

Author: McCuen

Publisher: Delmar/Cengage

AND

Title: Introduction to Computer Systems for Health Information Technology

Author: AHIMA

Publisher: AHIMA

B. Other Required Materials

Flash drive

Student Evaluation (Type of Grading)

Projects, Homework, Midterm and Final Exam

JOLIET JUNIOR COLLEGE COURSE SYLLABUS

JOLIET JUNIOR COLLEGE

Course Prefix and Number: HIM 220 Title: Quality Management in Health Care

Week	Unit, Topic, Class Activity (Indicate approximate time allotment for each topic/unit)	Comments
1	<p>Electronic Health Records Lecture Perform an Internet search on national health information initiatives on the healthcare delivery system. Prepare a two (2) page paper on your findings.</p>	
2	<p>Fundamental of Information Systems Lecture Perform an Internet search to obtain information on medical research clinical trials and disease registries. Complete two papers (2-3 pages each, doubled spaced). The first paper will include the name of the trial, what type of patient is involved, what facility is performing the trails, how long is the trial, expected outcomes and other pertinent information. The second paper will be on a disease registry. This paper will include the name of the registry, type of patient included in the registry, and other pertinent information.</p>	
3	<p>Introduction to Healthcare Information Systems Lecture Prepare data bases on patient demographics, diagnosis codes, procedure codes, and type of insurance.</p>	
4	<p>Information Systems for Managerial and Clinical Support Lecture Develop policies and procedures on using the Intranet and Internet applications in the electronic health record. You can obtain this information directly from the Johns textbook and/or by researching the Internet.</p>	
5	<p>Information Security Lecture Prepare policies and procedures on maintaining confidentiality and security. Prepare a two (2) page paper on your findings. You will also compose a confidentiality form that will be signed by all healthcare facility employees.</p>	
6	<p>Introduction to Information Technology - Hardware, Software, and Telecommunications Lecture Perform an Internet search on software and hardware used to protect data integrity. Prepare a 2-3 page paper on this search.</p>	

- 7 Medical Informatics: The Health Information Technology Decade
Lecture
Students will be assigned to a team and given one of the following topics regarding data base architecture and design: data modeling, data warehousing, and data dictionary. Your team will be responsible for performing an in-service in class on your topic. This in-service should include a power point presentation along with your written findings
- 8 An Introduction to the Administrative Applications of Computers: Accounting
Lecture
Prepare an Access database on patient demographics, diagnosis codes, procedure codes, type of insurance, charges and amount due. From this database you will prepare records on type of insurance, charges, and balance due.
- 9 Telemedicine
Lecture
Prepare policies and procedures on departmental and organizational information systems security and how it relates to telemedicine
- 10 Information Technology in Public Health
Lecture
Students will prepare a report on health record data collection of public health reporting based on the data collection tools discussed in this chapter
- 11 Information Technology in Radiology
Lecture
Complete assigned Case Studies on data definitions, vocabularies, terminologies, and dictionaries
- 12 Information Technology in Surgery - The Cutting Edge
Lecture
Complete assigned Case Studies on data storage and retrieval. A video on Iron Mountain will be shown on storage and retrieval of stored records. Prepare a one page paper on this video
- 13 Information Technology in Pharmacy and Information Technology in Dentistry
Lecture
Complete assigned Case Studies on data quality and integrity
- 14 Information Resources: Computer Assisted Instructions, Expert Systems, Health Information Online
Lecture
Prepare an Internet search on the personal health record. Sites to research include AHIMA, WebMD, and Google Health. Prepare a power point presentation on your choice of a PHR and how your choice compares to at least one other PHR system
- 15 Information Technology in Rehabilitative Therapies, Computer Medical Devices, Assistive Technology, and Prosthetic Devices
Lecture

16	Complete assigned Case Study on data sources, primary and secondary Security and Privacy in an Electronic Age Lecture Prepare a two (2) page research paper on current laws, accreditation, licensure, and certification standards related to health information initiatives	
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OBJECTIVES

1. Discuss new laws affecting privacy and security of medical information examined—HIPAA and the effects of the USA Patriot Act on medical privacy.
2. Perform computerization tasks in the medical office, the electronic medical record and bucket billing coding systems, insurance and various accounting reports.
3. Will understand the electronic health record
4. Will be able to use current computer and medical technologies
5. Have a firm grounding in the language necessary to comprehend telecommunications, networks, the Internet, and the World Wide Web
6. Understand the uses of computers in various aspects of health care delivery including nursing, radiography, psycho/social rehabilitation, pharmacy, and dental fields.
7. Have an appreciation of the wider applications of IT in all aspects of health care.
8. Understand telemedicine developments. Students will be instructed on sharing patient records and/or x-rays to distance exams, remote operation of medical instruments and teleconferencing.
9. Understand the latest technologies in surgery, pharmacy, dentistry, medical devices, enabling devices, computer assisted instruction, self-help software, and online medical literature databases.
10. All objectives listed for each chapter