



## **HIM 2003 Computers in Healthcare**

**Section/Course Code: MHW - 5503/WEB - 5502**

**Semester: Spring, 2014**

**Course Meets On: Online with mandatory Adobe Connect sessions and a virtual orientation**

**Course Time: Adobe Connect sessions will be selected Wednesdays from 8:30 a.m. – 9:20 a.m. CT.**

**Course Location: Online**

**Instructor: Nanette Sayles, EdD, RHIA, CCS, CHPS, CPHIMS, FAHIMA**

**Office: Virtual**

**Office Hours by Phone:**

**Monday: 11:30 to 1:30 p.m. (CT)**

**Tuesday: 8:00 a.m. – 10:00 a.m. (CT)**

**Wednesday: 5:00 p.m. – 8:00 p.m. (CT)**

**Thursday: 5:00 p.m. – 8:00 p.m. (CT)**

**Additional office hours can also be scheduled by appointment**

**Phone: 478-955-9238**

***Disclaimer: SYLLABI MAY BE MODIFIED AT ANY TIME WITHOUT PRIOR NOTICE***

## Course Description

A course designed to give the student a working knowledge of computerized information management systems utilized by health information management departments.

## Course Prerequisites

HIM 1003 and CS 1013 or CS 1003.

## Required Textbook & Course Materials (available in the bookstore)

***Introduction to Computer Systems for HIT.*** Sayles, N. 2010. AHIMA Press. ISBN 978-1-58426-220-6

***Health Information Management Technology: An Applied Approach.*** Sayles, N., 4<sup>th</sup> edition. 2013. AHIMA Press. ISBN 978-1-58426-352-4

***Case Studies in Health Information Management.*** McCuen, Sayles, and Schnering. 2<sup>nd</sup> edition. 2014. Cengage Learning. ISBN 978-1-13360-268-2

## Technology

This course is taught through the Moodle course management system. To be successful, students need to utilize the following technologies:

1. High speed Internet access
2. Microsoft Word
3. Microsoft Access
4. Flash drive designated for HIM\*
5. Adobe Reader (free download from <http://www.adobe.com/downloads/>)
6. Adobe Connect (through Internet link)
7. AHIMA Virtual Lab (through Internet link)
8. Webcam
9. Computer headset with microphone
10. Microsoft Excel (optional for use with grade spreadsheet)

\*Students will use the flash drive to store examples of work and a copy of the syllabus for future use.

If for some unforeseen circumstance the Moodle system should not be functioning or available please look for a message on the East Central homepage. If you do not see a message please call the ECC IT Helpdesk at (636) 584-6738 or the Moodle Helpdesk at (636) 584-6609 for assistance. If Moodle should go offline for a period of time there will be a message from your instructor in an email outside of Moodle or in the resource block of the course detailing modifications to the current assignment or schedule which will allow students additional time to complete work.

The best way to communicate with your instructor is through the Moodle course. If you send your instructor an email and you haven't heard back from her within two days

assume the instructor did not receive the email. Please call her at the phone number at the top of this syllabus.

## **Competencies and Objectives**

### **Course Objectives (Student Learning Outcomes)**

Upon successful completion of HIM 2003, the student will be able to:

- Assist in the selection and implementation of information systems.
- Differentiate between various information systems used in healthcare and health information management.
- Develop database using Access.
- Participate in the security program.
- Use technology to support data quality.

### **Common Learning Objective**

This course does not satisfy East Central College's Common Learning Objective.

### **General Education Information**

This course does not meet East Central College's general education requirements. This course is not a general education course such as English, history and biology.

### **Notice of Non-Discrimination**

East Central College does not discriminate on the basis of race, color, religion, national origin, ancestry, gender, age, disability, or veteran status. Inquiries/concerns regarding civil rights compliance as it relates to student programs and services may be directed to Ina Hays, Vice President of Student Development, 131 Buescher Hall, 1964 Prairie Dell Road, Union, MO 63084, (636) 584-6565 or [stnotice@eastcentral.edu](mailto:stnotice@eastcentral.edu).

### **Tobacco Free**

As of January 2013, ECC is completely tobacco free.

### **Classroom & Online Conduct and Behavior**

Student conduct in any classroom, laboratory or studio should adhere to the East Central College Student Conduct Policy and the Academic Honor Code. Classroom misconduct which may lead to your removal from class includes, but is not limited to, forgery or misrepresentation of class attendance, obstruction, disruption or interruption of teaching, failure to turn off cell phone which disrupts teaching, playing games or otherwise misusing a laptop or desktop computer during class time, any physical abuse or safety threat directed toward faculty, staff or other students, theft, property damage, disruptive, lewd or obscene conduct, abuse or misuse of computer time, repeated failure to attend class as required, repeated failure to participate or respond in class as required and any flagrant or disrespectful actions or words directed to the faculty or other students.

Faculty may request your removal from class for any such misconduct or excessive

absences. The instructor may then report a grade of record for such class as indicated within the course syllabus; the grade of record for the course is at the sole discretion of the faculty member. East Central College supports intellectual inquiry and diversity and respects the rights to students to academic freedom. Students with concerns regarding the quality of instruction in this course may direct those concerns to the appropriate division chair, Mary Beth Huxel, or the Vice President of Instruction or the Vice President of Student Development. Further, all students may use the electronic course and faculty evaluation tools to submit an evaluation of this instructor and this course.

### **Classroom Conduct:**

You are in college. You will be treated and respected as an adult. Because of the nature of discussion involved in this class, it is imperative that we respect each other's opinions and values. During virtual courses "raise your hand" and wait to be called upon to make comments and do not interrupt or talk over someone who is speaking. In a virtual class, such as this, speaking out without being called on can be very distracting. For the sake of everyone, do not make a practice of speaking out without permission. To do so constitutes a discipline problem. Discipline problems are not tolerated. Any discipline problem will be dealt with swiftly and permanently by removing the student from the class. This statement is your notice of expectations on this topic. There will be no additional reminders or warnings.

### **Online Conduct:**

Any discriminatory, derogatory or inappropriate comments are unacceptable and subject to the same disciplinary action that they would receive if they occurred face to face in the classroom. The instructor reserves the right to determine what qualifies as discriminatory, derogatory or inappropriate. If you have concerns about something that has been said, please contact your instructor (privately) immediately.

### **Class Format – Online via Moodle with Adobe Connect Sessions**

Students will be expected to attend all Adobe Connect sessions and complete all assignments, tests, and the final exam. Note that a test may be given at any time, with no prior notice, at the instructor's discretion. **Homework assignments, tests, exams or any other graded course work may not be made up.**

Students who attend are unable to attend the live session of Adobe Connect can listen to the recording of the session AND take a short quiz over the content of the session in order to earn the Adobe Connect points. The quiz must be completed by 11:55 p.m. two days after the Adobe Connect session. Students who attend the live session do not have to take the short quiz.

It is the student's responsibility to complete tests and in-class assignments. Students should complete work early in case of technical difficulties so that time is available to work out the problem.

Classroom guidelines are published on the Moodle website. Students are expected to abide by the guidelines set forth in this document. This document includes a number of

topics including Netiquette, expectations for discussion questions, expected turnaround times and much more.

With the exception of the first week, all work is due at 11:55 p.m. on Wednesdays. Please see the calendar at the end of this document for the schedule. Approximate dates of tests are indicated on the attached calendar schedule; the exact date of comprehensive final exam will be announced in class. A comprehensive final exam will be given according to the college's published final exam schedule.

Tests are closed book. No resource may be consulted.

## **Course Outline**

Please see the calendar at the end of this document.

## **Method of Student Evaluation**

A student's grade will be determined based strictly on points earned through the course of the semester. Points available will be discussed in class and posted to this syllabus after the first week of classes.

The student learning outcomes will be measured by the instructor. A student's final course grade will be determined according to the following breakdown and scale:

5 Tests X 100 = 500  
20 Assignments X 30 = 600  
1 Comprehensive final exam X 100 = 100  
15 Weekly discussion board postings X 10 = 150  
1 Introduction discussion board postings X 10 = 10  
5 Adobe Connect sessions X 20 = 100  
1 Orientation quiz X 40 = 40  
1 Pre-test X 10 = 10  
1 Post-test X 10 = 10  
2 Mandatory phone calls X 5 = 10

Total Possible Points for HIM 2003 - WEB Online: 1530

Grading is based on points earned during the semester:

1377 points - 1530 points = A  
1224 points – 1376 points = B  
1071 points – 1223 points = C (Must have a minimum grade of "C" to pass this course)  
918 – 1070 points = D (Repeat the course)  
917 points and below = F (Repeat the course)

\*NOTE\* This scale may change over the course of the semester based on additional assignments or point adjustments.

## **Late Work Policy:**

All students are responsible for completing all reading and writing assignments by the assigned due dates. With Internet access for submitting assignments, there is no excuse for late work. Late work will not be accepted and missed tests, exams, homework, and discussions cannot be made up.

## **Attendance**

ECC is an attendance taking institution. Student attendance in class, regardless of the delivery modality, is important for student success. Attendance will be taken at each class meeting and recorded in a class record.

The instructor will take action as stated in the course syllabus up to and including administrative withdrawal (WX) from the class for any student not considered attending but still officially enrolled in the class. Regardless of any action, the faculty member will report the last date of attendance as noted in the class record.

For a student to be considered attending the following conditions must be met:

- A student cannot be absent for all the class meetings held within 14 consecutive calendar days (or a prorated amount based on a reduced class meeting calendar) without having made regular and frequent contact with the instructor regarding class progress.
- A student cannot be absent for the equivalent (intermittent, nonconsecutive absences) of two weeks of class meeting time (or a prorated amount based on a reduced class meeting calendar) without having made regular and frequent contact with the instructor regarding class progress.
- A student cannot exceed the absences permitted under a more restrictive and specific course attendance policy, discussed below.

### **Attendance Policy:**

Attendance is required for successful completion of the course. As an online course, the class will only meet face to face at the mandatory orientation. Students are expected to log into the class a minimum of three times a week to complete assignments, take tests, and contribute to classroom discussions. In order to maintain academic quality:

- Students are responsible for the material covered in Moodle, tests, and the assigned homework
- Students must log into Adobe Connect on time and should not leave the virtual class early – either may result in being considered absent.
- Adobe Connect attendance will be recorded. Do not log in for another student or ask another student to log in for you. To do so can result in removal from the course and a grade of “F” at the instructor’s discretion.
- If a student misses logging in class ten days, the instructor **may** drop that student from the course. If you decide not to complete the course you need to officially withdraw. Failure to do so will result in a semester grade of “F”.  
This is an online class that will hold Adobe Connect sessions and a mandatory orientation. Four Adobe Connect sessions will be held.

### **Class Participation:**

The evaluation of the student's participation will be made using the following criteria:

- Active participation in class through discussions and email to faculty.
- The accuracy of statements made, as well as their relevance to the topics under discussion.
- The interest in class as shown by logging in and participation in online discussions.
- The willingness to listen to opinions and views that differ from one's own and the willingness to change views when one's own has been found faulty.

### **Other Policies:**

The student must complete each assignment prior to due dates (deadlines to meet the objectives of each lesson. At the college level, a minimum of two hours of study is strongly recommended for each hour of class. Should there be any question regarding the content of the lesson, the student should exhaust all sources of information to gain the answer or solution.

If you begin to experience difficulty with this course, please contact the instructor immediately. I will attempt to help you succeed. I can guide you, but I need to know that you need help. You will be your own best resource for success. The amount of time invested in study in this course will be returned in satisfaction of a job well done. Please do not hesitate to call or email me if I can be of any assistance. You are encouraged to make appointments to meet virtually during my posted office hours.

### **Online Learning Agreement**

All students are expected to comply with the [ECC Online Learning Agreement](#) which can be found in the Student Resources section on the login page of Moodle

### **Academic Honesty and Plagiarism Policy**

All students are expected to follow the Student Academic Handbook. The student academic handbook can be found at:

<http://www.eastcentral.edu/common/assets/StudentHandbook.pdf>

Academic honesty includes the following:

- Documenting all proprietary information that is received from outside sources, including books, articles, web sites, lectures, interviews, television, radio, etc.
- Putting quotation marks around the words that were written or spoken by someone other than oneself.
- Applying this standard to all assignments (papers, take home exams, presentations, etc.).

### **Plagiarism:**

To present someone else's work or ideas as one's own is plagiarism. A student commits plagiarism by:

- copying, word for word, someone else's writing without putting that passage in quotation marks and identifying the source.

- taking someone else's writing, changing some of the words, and not identifying the source;
- taking someone else's ideas or organization of ideas, putting them into his/her own words and not identifying the source;
- having someone else change the student's writing—a tutor, friend, or relative, for instance—and creating the impression that this is the student's own work; or
- purchasing or downloading papers or passages from the Web.

An instance of plagiarism may result in a grade of "0" for the assignment, a grade of "F" in the course and removal from the program. Electronic means of monitoring for plagiarism may be used. If you are unclear on how to write a paper or what constitutes plagiarism, contact the Learning Center for assistance.

### **Academic Dishonesty:**

Academic dishonesty is defined as any form of cheating or dishonesty that has the effect or intent of interfering with any academic exercise or a fair evaluation of a student's performance. Some examples and definitions are given in your student handbook. You may also access the college's policy on academic dishonesty online at the college website [www.eastcentral.edu](http://www.eastcentral.edu). College faculty can provide additional information, particularly as it relates to a specific course, laboratory, or assignment.

### **Early Alert**

East Central College has an Early Alert Referral System (EARS), which instructors may use to identify and report students who might be at risk of failing or doing poorly in a course for a variety of reasons – poor attendance, lack of participation, refusal to purchase required course materials, failure to complete assignments, lower than expected grades on tests and assignments, etc. Any questions about EARS may be directed to Ryan Crider, Developmental Studies Coordinator, at 636-584-6547 or [recrider@eastcentral.edu](mailto:recrider@eastcentral.edu)

### **Learning Centers**

Need help? Visit the Learning Center. For hours or additional information, contact the site nearest you:

Union: 636-584-6688 or email: [general\\_tutoring@eastcentral.edu](mailto:general_tutoring@eastcentral.edu)

Southwest Area Center (Sullivan): 573-468-8287, ext. 14

Rolla: 573-458-0165 or email: [rollacampus@eastcentral.edu](mailto:rollacampus@eastcentral.edu)

### **Access Services for Students with a Disability:**

If you have a health condition or other disability, which may require an accommodation in order for you to effectively participate in class, please make an appointment with the Access Counselor by contacting the Counseling and Career Services department secretary; located at Buescher Hall Office 153, phone (636) 584-6576 or TDD (636) 583-4851.

### **Domains, Subdomains, and Tasks**

The following Domains, Subdomains, and Tasks are covered by this course:



- IV.A.1: Use technology, including hardware and software, to ensure data collection, storage, analysis, and reporting of information.
- IV.A.2: Use common software applications such as spreadsheets, databases, word processing, graphics, presentation, e-mail, and so on in the execution of work processes.
- IV.A.3: Use specialized software in the completion of HIM processes such as record tracking, release of information, coding, grouping, registries, billing, quality improvement, and imaging.
- IV.A.4: Apply policies and procedures to the use of networks, including intranet and Internet applications, to facilitate the electronic health record (EHR), personal health record (PHR), public health, and other administrative applications.
- IV.A.5: Participate in the planning, design, selection, implementation, integration, testing, evaluation, and support for EHRs.
- IV.B.1: Apply knowledge of database architecture and design (such as data dictionary) to meet departmental needs.
- IV.C.1: Use appropriate electronic or imaging technology for data/record storage.
- IV.C.2: Query and generate reports to facilitate information retrieval using appropriate software.
- IV.C.3: Apply retention and destruction policies for health information.
- IV.D.1: Apply confidentiality and security measures to protect electronic health information.
- IV.D.2: Protect data integrity and validity using software or hardware technology.
- IV.D.3: Apply departmental and organizational data and information system security policies.
- IV.D.4: Use and summarize data compiled from audit trails and data quality monitoring programs.

## **Knowledge Clusters**

The following Knowledge Clusters are covered by this course:

### Data Storage and Retrieval

- Document archival, retrieval, and imaging systems (Analyzing, 4)
- Maintenance and monitoring of data storage systems (Analyzing, 4)

### Data Security and Healthcare Information Systems

- System architecture and design (Applying, 3)
- Screen design (Analyzing, 4)
- Data retrieval and maintenance (Analyzing, 4)
- Data security concepts (Applying, 3)
- Data integrity concepts (Analyzing, 4)
- Data integrity and security processes and monitoring (Applying, 3)



## Course Work Calendar

**This may be revised as the semester progresses – check this site at least weekly. Adobe Connect sessions are subject to change.**

There will be a virtual orientation via Adobe Connect

Chapters from Introduction to Computer Systems for Health Information Technology unless otherwise indicated by Sayles HIT

<b><i>Week/Due Date</i></b>	<b><i>Topic/Assignments</i></b>	<b><i>Due</i></b>
January 15  (Due date deferred until January 18)	Orientation  Chapter 1 Introduction to Computers  Moodle	Introduction Discussion  Discussion A  Pre-test  Orientation Quiz
January 22	Chapter 2 Common Software Applications	Discussion B  Adobe Connect session 1: 8:30 a.m. – 9:20 a.m.  Case 5-34 Intranet Functionality
January 29	Chapter 3 Data Quality  Moodle	Discussion C  Test 1 over chapters 1 and 2 (available January 27 at 9:00 a.m. to January 29 at 11:55 p.m. CT)  Mandatory phone call
February 5	Chapter 4 Databases  Sayles HIT Chapter 14 Fundamentals of Electronic Information Systems  Moodle	Discussion D  Assignment: Case 5-4 Database Design  Adobe Connect session 2: 8:30 a.m. – 9:20 a.m. CT
February 12	Chapter 5 System Selection and Implementation  Moodle	Discussion E  Assignment: Case 5-1 System Conversion  Assignment: Case 5-5 Database

		<p>Development</p> <p>Test 2 over chapters 3 and 4 as well as Sayles HIT Chapter 14 (available February 10 at 9:00 a.m. to February 12 at 11:55 p.m. CT)</p>
February 19	<p>Chapter 6 Data Storage and Retrieval</p> <p>Moodle</p>	<p>Discussion F</p> <p>Assignment: Case 5-17 Computerized Provider Order Entry Implementation</p> <p>Assignment: Case 5-47 Single Vendor or Best of Breed</p>
February 26	<p>Chapter 7 Computers in HIM</p> <p>Moodle</p>	<p>Discussion G</p> <p>Assignment: Case 5-6 System Selection</p> <p>Assignment: Case 5-38 Storage Requirements</p> <p>Assignment: Case 5-7 System Life Cycle</p> <p>Adobe Connect session 3: 8:30 a.m. – 9:20 a.m. CT</p>
March 5*	<p>Chapter 8 Administrative Information Systems</p> <p>Moodle</p>	<p>Discussion H</p> <p>Test 3 over chapters 5, 6, and 7 (available March 3 at 9:00 a.m. to March 5 at 11:55 p.m. CT)</p> <p>Assignment: Virtual lab: HIM Systems</p>
March 12	<p>Chapter 9 Clinical Information Systems</p> <p>Sayles HIT Chapter 15 Introduction to Electronic Health Information Systems</p> <p>Moodle</p>	<p>Discussion I</p> <p>Assignment: Case 5-25 Choosing Software Packages</p> <p>Mandatory call 2</p>
March 19	<p>Chapter 10 Electronic Health Record</p> <p>Sayles HIT Chapter 16</p>	<p>Discussion J</p>

	Electronic Health Record Meaningful Use Health Information Exchange Moodle	
March 26	<b>Spring Break</b>	None
April 2	Chapter 11 Speech Recognition Moodle	Discussion K Assignment: Virtual Lab: EHR Adobe Connect session 4: 8:30 a.m. – 9:20 a.m. CT Case 5-37 Voice Recognition Editing
April 9	Chapter 12 Privacy and Security Chapter 17 (Sayles HIT) Moodle	Discussion L Test 4 over chapters 8, 9, and 10 (available April 9 at 9:00 a.m. to April 9 at 11:55 p.m. CT)
April 16	Chapter 12 Privacy and Security Chapter 17 (Sayles HIT) Moodle	Discussion M Assignment: Case 5-33 Employee System Access Termination Procedure Assignment: Case 5-43 Password Management Assignment: Audit Trail
April 23	Chapter 13 Role of HIM Professionals in Information Systems Moodle	Discussion N Assignment: Case 5-42 Audit Triggers Assignment: Case 5-40 Contingency Planning
April 30	Chapter 14 The Future of Computers in Healthcare Moodle	Discussion O Assignment: Case 5-55 Meaningful Use Assignment Case 5-56 Clinical Vocabularies Adobe Connect session 5: 8:30 a.m. – 9:20 a.m. CT

May 7	Study for final	Test 5 over chapters 11, 12, 13, and 14 (available December 2 at 9:00 a.m. to December 4 at 11:55 p.m. CT)  Post-test
May 12	Final exam	Comprehensive final exam will be available December 7 at 9:00 a.m. to December 9 at 11:55 p.m. CT

\*Midsemester

**Project, assignment, and discussion requirements and instructions will be posted  
on the Moodle Course Site.**

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