

# HITT 1211 Health Information Systems Spring 2019 / CRN 17135

## **PROFESSOR**

Nikki Blaze, MBA, RHIT, CCS office hours: by appointment

Phone: Program Administrative Assistant (713)718-7365 leave message

#### **Class Time**

Online

#### **IMPORTANT DATES**

First class meeting	1/17/2019 at 7:30PM
GoToMeeting day and time	Thursdays at 7:30PM to 8:30PM Register at: https://attendee.gototraining.com/r/2445794742716355073
Last day to withdraw	4/1/2019 at 4:30pm
Final Exam (on Coleman campus Tower, 1900 Pressler, 2 <sup>nd</sup> floor computer labs)	5/9/2019 at 6pm to 9pm

## **Course Description**

Computers directly influence the healthcare industry as a whole, whether through data exchanged within an organization or a network that crosses geographic boundaries. Health information management (HIM) professionals play an important role in facilitating the ease of data entry, use, analysis, and maintenance in all levels of computer systems and networks in healthcare organizations.

#### **Textbook**

- 1. Health Information Management Technology: An Applied Approach (5th edition) Sayles and Gordon
- 2. Health Information: Management of a Strategic Resource (5th edition) Abdelhak and Hanken
- 3. Information Technology for the Health Professions (4th edition) Burke & Weill

## **COURSE GOALS**

At the end of this course, students will be able to:

Analyze basic functions and purposes of personal computers and Internet technologies



- Evaluate best practices and standard rules for Internet and computer use in a health care setting
- Apply the basic features of common software packages
- Analyze the features and functionality of information systems commonly used by HIM professionals
- Evaluate the general issues facing privacy and security as they relate to health care information
- Define the purpose of an electronic health record (EHR)
- Analyze the technology that is needed in an HIM department

#### **SCAN COMPETENCIES**

Subdomain I.C. Data Governance (SCANS: F1 Reading, F2 Writing)

- 1. Apply policies and procedures to ensure the accuracy and integrity of health data
  - a. Data stewardship and data sources for patient care (management, billing reports, registries and or databases).
  - b. Data integrity concepts & standards; data interchange standards including X2 and HL7.
  - c. Medical staff by laws, hospital by laws and provider contracts with facilities.

Subdomain 1.D. Data Management

- 2. Collect and maintain health data
  - a. Health data collection tools (screen design and screens)
  - b. Data elements, data sets, databases and indices.
  - c. Data mapping and data warehousing.
  - d. Graphical tools and presentations.

Subdomain III.A. Health Information Technologies (SCANS: F1 Reading, F2 Writing, C19 Applies technology to a task)

- 3. Utilize software in the completion of HIM process.
  - a. Record tracking, release of information, coding, grouping, registries, billing, quality improvement, imaging, EHRs, PHRs, and document imaging.
- 4. Explain policies and procedures of networks, including intranet and internet to facilitate clinical and administrative applications.
  - a. Communication and network technologies including EHRs, PHRs, HIEs, portals, public health, standards and telehealth

Subdomain III.B. Information Management Strategic Planning (SCANS: F6 Speaking, C15 Understands systems)

- 5. Explain the process used in the selection and implementation of health information management systems.
  - a. Strategic planning process, integration of systems and information management strategic plan.
- 6. Utilize health information to support enterprise wide decision support for strategic planning.



b. Business planning; market share planning, disaster and recovery planning. Subdomain III. C. Analytics and Decision Support (SCANS: C18 Selects technology)

- 7. Explain analytics and decision support
  - a. Analytics and decision support (data visualization, dashboard, data capture tools and technologies).
- 8. IVa2 Use electronic imaging technology to store medical records.

Subdomain III.F. Consumer Informatics (SCANS: F7 Creative thinking, F12 Reasoning)

- 9. Explain usability and accessibility of health information by patients including current trends and future challenges.
  - a. Mobile technologies, patient portals, patient education, outreach, patient safety, PHRs and patient navigation.
  - b. IVa3 Query facility wide databases to retrieve information.

Subdomain VI.F Strategic and Organizational Management (SCANS: F7 Creative thinking, F9 Problem solving, C17 Improves and designs systems)

- 10. Apply information and data strategies in support of information governance initiatives.
  - a. Information and data strategy methods and techniques.
- 11. Utilize enterprise wide information assets in support of organizational strategies and objectives.
  - a. Governance standards, data information visualization, models and presentations.

## **EQUAL EDUCATIONAL & EMPLOYMENT OPPORTUNITY**

HCCS seeks to provide equal education opportunities without regard to race, color, religion, national origin, sex, age or handicap.

#### TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, 20 U.S.C. A§ 1681 ET. SEQ.

Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students' rights with regard to sex/gender discrimination. Information regarding these rights are on the HCC website under Students-Anti-discrimination. Students who are pregnant and require accommodations should contact any of the ADA Counselors for assistance.

It is important that every student understands and conforms to respectful behavior while at HCC. Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations.

Log in to: <u>www.edurisksolutions.org</u>. Sign in using your HCC student e-mail account, then go to the button at the top right that says Login and enter your student number.

#### **ADA STATEMENT**

HCCS recognizes its responsibility not to discriminate against anyone who has a documented disability that substantially limits one more major life activities; has a record of such impairment; or



is regarded as having an impairment. Specific policies have been established to enable students with documented disabilities who are otherwise qualified, to request accommodations which would allow them equal access to the College under Section 504 of the Rehabilitation Act of 1973 and under the Americans with Disabilities Act of 1990. A *new*, updated letter of accommodation should be submitted to instructors within the first three days of each semester. Students who submit a letter of accommodation any time after the first three days of a semester should expect to begin receiving accommodations following a 24-hour time frame for instructors to implement new changes. Obtaining reasonable accommodations is an interactive process that begins with the student's disclosure of his/her disability directly with the ADA Counselor in Ability Services. The ADA Counselor for the Coleman College is located in room 101 of the Learning Success Center (LSC).

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at the respective college at the beginning of each semester. Faculty are authorized to provide only the accommodations requested by the Disability Support Services Office. For questions, contact Ms. Brandy Lerman at 713-718-7376. You may also visit the ADA web site at <a href="http://www.hccs.edu/district/students/disability-services/ada-counselors/">http://www.hccs.edu/district/students/disability-services/ada-counselors/</a>

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status-in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to: David Cross, Director EEO/Compliance, Office of Institutional Equity and Diversity, 3100 Main, Houston, Tx 77266 or Institutional.Equity@hccs.edu, (713)718-8271.

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <a href="http://www.hccs.edu/district/students/disability-services/">http://www.hccs.edu/district/students/disability-services/</a>

#### **HCC COURSE WITHDRAWAL POLICY**

The State of Texas has begun to impose penalties on students who drop courses excessively. For example, if you repeat the same course more than twice, you have to pay extra tuition. Beginning



in Fall 2007, the Texas Legislature passed a law limiting students to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor will "alert" you and counselors that you might fail a class because of excessive absences and/or poor academic performance. You should visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

If you plan on withdrawing from your class, you **MUST** contact a counselor or your professor prior to withdrawing (dropping) the class and this must be done **PRIOR** to the withdrawal deadline to receive a "W" on your transcript. \*\*Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. **Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline. If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.** 

#### NOTICE

Students who repeat a course for a third or more times may soon face significant tuition/fee increases at HCC and other Texas public colleges and universities. Please ask your instructor/counselor about opportunities for tutoring / other assistance prior to considering course withdrawal or if you are not receiving passing grades.

#### **EXPANDED ONLINE TUTORING**

Onsite tutor is available upon application at the Academic Success Center of Coleman Campus.

Online tutoring is offered to students in MATH, BIOL, CHEM, PHYS, ENGL, PSYC, and for papers in all subjects. Students may self-register with any e-mail address, choosing their own user names and passwords. As always, students may submit work 24 / 7/ 365 and will get responses within 24 hours -- and usually much faster than that.

For more information or for an electronic version of the registration and information flyer, contact deborah.hardwick@hccs.edu.

## **EARLY ALERT SYLLABUS STATEMENT**

The Houston Community College Early Alert program has been established to assist in the overall effort to retain students who are at risk of failing, withdrawing, or dropping a course. This process requires instructional faculty and student support staff to identify students who are performing



poorly as early as possible and provide relevant support services to help students overcome their deficiencies. A student is identified when an instructor notices academic or personal difficulties that affect student's academic performance. The possible problem (s) could be tardiness, missed/failed test scores, excessive absences, or a number of other circumstances. Once a referral is made counselors will then contact students to discuss the issues and possible solutions to their academic difficulties.

## **ATTENDANCE POLICY**

Students taking Online courses complete weekly assignments at their own computers and communicate with their instructor by electronic mail and other provided web-based technologies. Students must logon at least once per week to be considered present for class. Students complete assignments, take tests, and complete all other coursework just as they would in an on-campus class. Instructor will have weekly on-line chats with students. Course work will be submitted via the internet. Students must be in attendance on campus for appointed times and major exams.

#### **CAMPUS CARRY**

"At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page

at http://www.hccs.edu/district/departments/police/campus-carry/."

#### **TEXAS HB1508**

Texas HB 1508 requires the following information be given to students. If you are applying for admission to a program that prepares an individual for an initial occupational license or certification and/or if you later decide to change to a program that prepares you for an initial occupational license or certification, in accordance with state law, please be advised of the following:

- An individual who has been charged or convicted of an offense or who is on probation may not be eligible for issuance of an occupational license or certification upon completion of the educational program.
- 2. It is the responsibility of the individual to immediately report to the program any change in status that would affect that individual's eligibility to apply for a license or certification.
- Local, state or national licensing and certification authorities may issue additional guidelines related to criminal history. Applicants should contact their respective licensing or certification authority for more details.

Most health care programs require all students, admitted to the program, to submit to a national background check which may include fingerprinting. Applicants are encouraged to review all applicable eligibility requirements related to the respective occupational license or certification. Questions related to eligibility requirements should be directed to the individual program and applicable licensing or certification authority.



#### **HCC ONLINE STUDENT HANDBOOK**

The HCC Online Student Handbook contains Rules and procedures unique to the online student. Students should have reviewed the handbook as part of the mandatory orientation. It is the student's responsibility to be familiar with the handbook's contents. The handbook contains valuable information such as contacts, links to policies and procedures (how to drop, attendance requirements, etc.), student services (ADA, financial aid, degree planning, etc.), course information, testing procedures, technical support, and academic calendar

# **CLASS REQUIREMENTS**

- 1. Read chapters in textbook.
- 2. Watch videos and complete the quizzes.
- 3. Print off PowerPoints and use as study guides.
- 4. Complete tests, guizzes and or assignments before 11pm on Sundays.
- 5. Last day to drop with a WP is April 1st at 4:30pm.
- 6. Final Exam on Coleman campus May 9<sup>th</sup> at 6pm room Coleman Campus Tower, 2<sup>nd</sup> floor computer labs

## **GRADING POLICY**

Tests (including Mid-Term)	20%
Assignments	10%
Final examination	70%

## 3 extra credit for attending HAHIMA meeting (may only be used for 1 HITT course).

The percentage of each activity will weight in the final grade regardless if the student participated in the activity or test.

Academic Dishonesty will not be tolerated. Exams and assignments are individual assignments. Plagiarized and copied papers will be handled in accordance with established HCCS college policy. Do not copy the work of others.

#### **GRADING SCALE**

90 - 100	Α
80 - 89	В
75 - 79	C

74 and below F (No Ds will be given)



#### **EXAMS**

Exams need to be completed by the due date. The final exam will be taken at the Coleman College on the assigned dates at and time in Room (TBD).

**Exams will be taken in respondus lock-down browser.** Be sure you save every test question after you answer. Do not exit lock down browser once you begin your test because it will shut down and you will not be able to access your test again. Exams cannot be retaken after a student has logged into the exam for any reason. Students have access to computers at HCC campuses.

# **EGLS3** -- Evaluation for Greater Learning Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

## **ASSIGNMENTS**

## **Assignments:**

- 1. Group Project During HIP Week develop poster boards for display in atrium
  - Group 1 Describe EHR
  - Group 2 Describe Meaningful Use
  - Group 3 Flowchart of inpatient information
  - Group 4 Describe Personal Health Record
- 2. Individual Assignments due weekly
- 3. Discussions due weekly

## **SCHEDULE**

Weeks 1 & 2: (First class meeting will be gotomeeting)

Introduction to Course Syllabus Quiz

**Lesson 1 Checklist: Basic Functions of Computers** 

- Read
  - o Information Technology for the Health Professions, 4:
    - Chapter 1, "Introduction to Information Technology—Hardware, Software, and Telecommunications" (pp. 1–16)
- View
  - Online Lesson Presentation
- Discuss
  - Discussion 1.1: Introductions
  - Discussion 1.2: Hardware and Software
- Assignment
  - o Assignment 1.1: Electronic Confidential Records
- Assessment
  - o Quiz 1

#### Week 3:

# **Lesson 2 Checklist: Internet Technologies**

- Read
  - Information Technology for the Health Professions, 4:
    - Chapter 1, "Introduction to Information Technology—Hardware, Software, and Telecommunications" (pp. 1–16)
    - Chapter 3, "An Introduction to the Administrative Applications of Computers: Practice Management, Scheduling, and Accounting" (pp. 41–61)
- View
  - Online Lesson Presentation
- Discuss
  - Discussion 2.1: Functions of Computer-Assisted Coding
- Assignment
  - Assignment 2.1: HIM Professionals
- Assessment
  - o Quiz 2

# Week 4:

Lesson 3 Checklist: Computer and Internet Professionalism and Etiquette

- Read
  - Information Technology for the Health Professions, 4:
    - Chapter 2, "Medical Informatics: The American Recovery and Reinvestment Act, HITECH, and the Health Information Technology Decade" (pp. 17–40)
    - Chapter 12, "Security and Privacy in an Electronic Age" (pp. 289–317)
- View
  - o Online Lesson Presentation
- Discuss
  - o Discussion 3.1: Emailing Within a Healthcare Setting
- Assignment
  - o Assignment 3.1: Using Social Media in Health Care
- Assessment
  - o Quiz 3

Week 5:

Lesson 4 Checklist: AHIMA Engage and AHIMA Body of Knowledge

- View
  - o Online Lesson Presentation
- Discuss
  - o Discussion 4.1: Purpose of a Medical Community
- Assignment
  - Assignment 4.1: Characteristics of AHIMA Data
- Assessment
  - o Quiz 4

Week 6:



## **Lesson 5 Checklist: Software**

- Read
  - Information Technology for the Health Professions, 4:
    - Chapter 1, "Introduction to Information Technology—Hardware, Software, and Telecommunications" (pp. 1–16)
- View
  - Online Lesson Presentation
- Discuss
  - Discussion 5.1: Uses for Adobe Programs
- Assignment
  - Assignment 5.1: Functions of Microsoft Products
- Assessment
  - o Quiz 5

#### Week 7:

# Lesson 6 Checklist: Functionality Features of Clinical Information Systems for the HIM Professional

- Read
  - Information Technology for the Health Professions, 4:
    - Chapter 2, "Medical Informatics: The American Recovery and Reinvestment Act, HITECH, and the Health Information Technology Decade" (pp. 17–40)
    - Chapter 3, "An Introduction to the Administrative Applications of Computers: Practice Management, Scheduling, and Accounting" (pp. 41–61)
- View
  - Online Lesson Presentation
- Discuss
  - o Discussion 6.1: Effective Healthcare Systems
- Assignment
  - o Assignment 6.1: Methods of Report Design and Retention
- Assessment
  - o Quiz 6

#### Week 8:

Mid Term Exam Lessons 1 - 6



# Week 9: March 11 – 17 Spring Break (No GoToMeeting)



Week 10:

Lesson 7 Checklist: Administrative Information Systems for the HIM Professional

- Read
  - o Information Technology for the Health Professions, 4:
    - Chapter 2, "Medical Informatics: The American Recovery and Reinvestment Act, HITECH, and the Health Information Technology Decade" (pp. 17–40)
    - Chapter 3, "An Introduction to the Administrative Applications of Computers:
       Practice Management, Scheduling, and Accounting" (pp. 41–61)
- View
  - Online Lesson Presentation
- Discuss
  - o Discussion 7.1: Data Systems
- Assignment
  - Assignment 7.1: HIM Professional Administrative Systems
- Assessment
  - o Quiz 7

\*Week 11: Health Information Profession (HIP) Week March 28th

Lesson 8 Checklist: Privacy and Security in Healthcare Information, Part 1

- Read
  - o Information Technology for the Health Professions, 4:
    - Chapter 12, "Security and Privacy in an Electronic Age" (pp. 289–317)



- View
  - o Online Lesson Presentation
- Discuss
  - Discussion 8.1: Patient Security
- Assignment
  - o Assignment 8.1: Raw Facts and Information in Health Care
  - o Group Assignment
- Assessment
  - o Quiz 8

# Week 12:

Lesson 9 Checklist: Privacy and Security in Healthcare Information, Part 2

- Read
  - o Information Technology for the Health Professions, 4:
    - Chapter 2, "Medical Informatics: The American Recovery and Reinvestment Act, HITECH, and the Health Information Technology Decade" (pp. 17–40)
    - Chapter 3, "An Introduction to the Administrative Applications of Computers: Practice Management, Scheduling, and Accounting" (pp. 41–61)
- View
  - o Online Lesson Presentation
- Discuss
  - o Discussion 9.1: Patient Privacy
- Assignment
  - Assignment 9.1: Federal Protection
- Assessment
  - o Quiz 9

## Week 13:

Lesson 10 Checklist: Privacy and Security in Healthcare Information, Part 3

- Read
  - o Information Technology for the Health Professions, 4:
    - Chapter 12, "Security and Privacy in an Electronic Age" (pp. 289–317)



- View
  - o Online Lesson Presentation
- Discuss
  - o Discussion 10.1: National Health Information Network
  - o Discussion 10.2: Record Compliance
- Assignment
  - Assignment 10.1: Actions to Ensure Patient Security
- Assessment
  - o Quiz 10

# Week 14:

Lesson 11 Checklist: Electronic Health Records, Part 1

- Read
  - Information Technology for the Health Professions, 4:
    - Chapter 2, "Medical Informatics: The American Recovery and Reinvestment Act, HITECH, and the Health Information Technology Decade" (pp. 17–40)
    - Chapter 3, "An Introduction to the Administrative Applications of Computers: Practice Management, Scheduling, and Accounting" (pp. 41–61)
- View
  - o Online Lesson Presentation
- Discuss
  - o Discussion 11.1: Elements of Electronic Health Records
- Assignment
  - Assignment 11.1: Advantages and Disadvantages of Electronic Health Records
- Assessment
  - o Quiz 11

## Week 15:

Lesson 12 Checklist: Electronic Health Records, Part 2

- Read
  - Information Technology for the Health Professions, 4:
    - Chapter 4, "Telemedicine" (pp. 62–98)
    - Chapter 5, "Information Technology in Public Health" (pp. 99–132)



- Chapter 6, "Information Technology in Radiology" (pp. 133–157)
- Chapter 7, "Information Technology in Surgery—The Cutting Edge" (pp. 158–178)
- Chapter 8, "Information Technology in Pharmacy" (pp. 179–207)
- Chapter 9, "Information Technology in Dentistry" (pp. 208–230)
- Chapter 10, "Informational Resources: Computer-Assisted Instruction, Expert Systems, Health" (pp. 231–262)
- Chapter 11, "Information Technology in Rehabilitative Therapies: Computerized Medical Devices, Assistive Technology, and Prosthetic Devices" (pp. 263–288)
- View
  - Online Lesson Presentation
- Discuss
  - o Discussion 12.1: HIM Software Products
- Assignment
  - o Assignment 12.1: Administrative Healthcare Systems
- Assessment
  - o Quiz 12

## Week 16:

**Final Exam Review**