Model Curriculum

Healthcare Information Technology
HCIT

I. Introductory Section

A. Purpose of the Model Curriculum

The purpose of this model curriculum is to provide a resource that can be used in its entirety or adapted as needed by faculty for instruction. The model curriculum may be beneficial to those starting new programs, involved in program improvement, or program review. The *Healthcare Information Technology* model curriculum is available to any educational entity in the State of California interested in providing students with the tools and skills to be successful in this entry level allied health occupation program. This program was designed for the incumbent workforce, but can be applied to a credited college low bearing certificate program, leading to a stackable credential.

The "Healthcare Information Technology" model curriculum, with participation from College of the Canyons, Saddleback College and Santa Barbara City College, will address the increasing need for skilled workers in the health care information technology field. As the trend continues to access healthcare information electronically, the demand for a strong supply of skilled workers continues to rise. The Deputy Sector Navigators for the Health and Information & Communication Technologies sectors have merged with industry and education to address the needs identified in Health Information Technology (HIT) and Healthcare Information Technology (HCIT) (Appendix A). This collaboration has joined together experts from industry, local and national associations, and community college educators to identify skill gaps, coordinate competencies, and align curriculum.

Response to Need

Skilled workers in Healthcare Information Technology (HCIT) are urgently needed by healthcare providers statewide. With the implementation of the Affordable Care Act (2010), the demand for well-trained frontline workers has increased, these include front and help desk personnel. Current program models incorporate a two year associate degree program in Health Information Technology (HIT); however, this educational support fails to alleviate workforce gaps completely to meet the incumbent worker time available due to family and other socioeconomic factors. As HIT and HCIT evolves, the transformational opportunities it presents continue to grow exponentially. Access to health information through technology, including internet and mobile applications suggest a future of personalized healthcare delivery requiring little, if any, in-person interaction with healthcare providers. Demand for skilled workers in these sectors continues to rise faster than supply, resulting in an increased wage premium for skilled and educated workers. Current unemployment rates of two percent or less in this area for college graduates is impressive.

To address the risk of non-completion due to regular rigorous academic calendars, various strategies have been discussed to increase student completion, including the development of a short-term, eight-week certificate model (e.g., credit, not-for-credit or non-credit). Emphasizing "stackable" courses, incumbent workers can enroll in various courses and complete several or all courses associated with the industry-identified certificate. By providing content delivery through various formats and non-

traditional structures, students are provided options that best fit their learning styles. In addition, developing a common curriculum, this statewide certificate model will allow students to complete coursework at partnering colleges, all of which will apply towards the final certificate/badge.

Course delivery modes will vary from campus-to-campus, as credit, not-for-credit, or non-credit coursework is made available. All programs and courses will contribute to workforce skill development for Healthcare IT that focuses on addressing a workforce skills gap and/or occupational shortage. The statewide support from associations and industry share the values of this short-term training program to meet the needs of the incumbent workforce. The use of this model curriculum can be used as a career pathway from the K-12 to Community College, with articulated and/or dual enrolled courses like that of Medical Terminology and Exploring Computers.

Finally, many champions arose from a statewide convening and vowed active partnerships in developing programs such as the short-term training certificate to better prepare the workforce in Healthcare IT. These include the Healthcare Information and Management Systems Society (HIMSS) and The American Health Information Management Association (AHIMA).

B. Description

Healthcare Information Technology Specialist

This Industry Driven Regional Collaborative Grant was provided by the California Community Colleges Chancellor's Office. The purpose was to align industry partners and education to address the high demand for upskilled workers in Healthcare Information Technology. This is an emerging trend of skills needed for existing entry level workers such as help desk coordinators, information technicians, medical assistants, certified nurse's aides, and/or other entry level workers. A partnership with the Deputy Sector Navigators in Information and Communications Technologies & Digital Media (ICT/DM) and Health sectors worked in tandem with industry partners statewide, including leaders from two of the national organizations American Health Information Management Association (AHIMA) and Healthcare Information and Management Systems Society (HIMSS). The definitions of Health Information Workforce submitted by AHIMA were adopted at the inaugural advisory meeting. This provided a ground for universal communication and development in this curriculum process.

The IDRC brought together statewide stakeholders to align and discuss the skills gaps needed for the incumbent workforce, and provided a checklist of skills required in the curriculum for this project (Appendix B).

An industry job analysis or Developing a Curriculum (DACUM©) panel was held early April 2016, in Ventura, California. Working professionals (are considered experts in their jobs) and know what is taught in the classroom does not always match what is performed on the job. There is a perceptible disconnect between education and the real world and too often, outdated skills are being taught in the classroom. The DACUM process was developed to help bridge this gap, by taking industry

professionals and having them formulate a better educational approach, based off of what they do on a day to day basis.

The panel consisted of six professionals. Each had a different job title but similar backgrounds, one working as a regulatory audit coordinator, there was a RN working with HEDIS, a medical assistant instructor, a health information clerk, a MA at a plastic surgeons office and lastly, a health information technologist. This panel came to develop what is now titled the Healthcare Information Optimization Specialist job analysis (Appendix C).

Three community colleges partnered in the curriculum aligned and development of six courses that were identified by the needs assessment conducted with industry advisories and the job analysis. The job analysis created a job description and title of Healthcare Information Optimization Specialist. The colleges which were across several community college regions were Saddleback Community College, Santa Barbara Community College and grant host College of the Canyons. A total of five faculty champions and curriculum writers from all colleges meet variably thorough out the project period to align and develop curriculum for this HCIT model curriculum

Grant managers Paula Hodge (ICT/DM) and John Cordova (Health), along with faculty member Safiah Mamoon (Saddleback College) met with Vice President of Certification with AHIMA to discuss the project outcomes. This discussion lead to the alignment of these skills and courses to AHIMA's updated industry recognized certification for Certified Healthcare Technology Specialist (CHTS). This will provide a level of training to their recommendations for eligibility that include: trained through short-duration (typically six months) non-degree health IT workforce development program, or members of the workforce with relevant experience or other types of training. Discussions are still in progress with AHIMA regarding the CHTS certification.

C. Purpose Statement

The purpose of this model curriculum is to provide a prototype curriculum that can be used in its entirety or adapted as needed by educators for instruction. The intent of this curriculum is to prepare healthcare information technician/ specialists to apply the concepts of health informatics with general administrative front office classifications to health care information using industry standards.

D. Core Behavioral Objectives

Completion of this program will provide:
1. Comprehensive and high valued courses that enable students and professionals to demonstrate proficiency in various healthcare IT workforce roles integral to the implementation and management of electronic health information, due to the increase for digital access in healthcare information exchange;
2. Familiarization with emerging roles in healthcare information technologies, and to participate in and facilitate the adoption and use of various technologies in healthcare, to bridge the skills gap between the fields of health and IT;
3. Adaptation to the changes in the health informatics field;

4. Preparation to pursue ongoing learning opportunities; and
5. Increased knowledge of digitalization of health care information.

E. Courses and Modules

This model curriculum will include six courses: Medical Terminology, Exploring Computers, Structured Query Language (SQL) for Health Care Information Technology; Healthcare Organizations Practices, Business Intelligence Tools and Reporting, and the capstone course Healthcare Information Technology. For this project a student can "test" out of courses already taken, given an example of a Medical Assistant will not have to take Medical Terminology or Healthcare Organization Practices, as these are already part of their scope of work.

Course Descriptions

Medical Terminology

Overview:

This course provides students with the application and orientation to medical terminology, basic structure of medical terms and their components- roots, prefixes, suffixes and combining forms. Emphasizes analysis, meaning, spelling and pronunciation to building a medical vocabulary applicable to the specialties of medicine, major diseases and terms used on physical examination, diagnosis and treatment.

Course delivery:	Online/Campus Based
Total hours:	6 hours/week for 8 weeks (48 hours total)
Suggest units:	3 units

Exploring Computers

Overview:

This course is designed to afford students the opportunity to acquire basic digital office technology skills used in the modern office, including those related to computer processes, Internet technologies, social media, word processing, spreadsheets, relational databases, and communication software such as e-mail, presentation, and information dissemination applications. The course is intended for those seeking entry-level clerical office positions in a modern medical setting

Course delivery:	Online/Campus Based
Total hours:	5 hours/week for 8 weeks (40hrs total)
Suggest units:	1.5 units

Structured Query Language (SQL) for Healthcare Information Tech

Overview:

This course provides students with the fundamental knowledge to get started learning SQL, the standard data query language used in almost all databases today. SQL is one of the most common tools used to query relational databases. This course teaches how to use SQL to retrieve, insert, update, and delete information from relational databases in a sophisticated manner.

Course delivery:	Lecture course
Total hours:	5 hours/week for 8 weeks
Suggest units:	2 units

Business Intelligence Tools and Reporting

Overview:

This course details the critical importance of accessing and analyzing data in the health care industry. Business Intelligence tools allow this to happen. Learn how to develop database-independent reports using industry-standard reporting tools.

Course delivery: Lecture course
Total hours: 5 hours/week for 16 weeks
Suggest units: 2/3 units

Healthcare Organization Practices

Overview:

This course provides students with the fundamental knowledge to work in entry-level office administrative positions for various health-care facilities. Discussions will include medical ethics, legal responsibilities, and appropriate communications skills. A practical "hands-on" learning approach to concepts, skills and applied applications of computer software programs will be introduced. Medical office software for completing patient registration, records, appointment scheduling, and billing and collection will be examined.

Course delivery: Online/Campus based
Total hours: 10 hours/week for 8 weeks
Suggest units: 3 units

Healthcare Information Technology (HCIT) Capstone

Overview:

This capstone course covers technologies used to manage of health information; communication and network technologies; data and information file structures; health data collection tools, health information exchanges, data and interchange standards, consumer informatics, data integrity and security. Federal efforts enhancing healthcare quality via use of technology, and the SDLC process are covered. Labs allow students to interact with various health information management related software.

Course delivery: Online/Campus Based
Total hours: 10 hours/week for 8 weeks
Suggest units: 3 units

Acknowledgements

DACUM Committee – August 2016

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Faculty Champions

Jon Bek

Jon Bek spent 25 years as a practitioner in Information technology, transitioning to Higher Education full time in 2011, teaching Computer Information Systems. Mr. Bek began teaching Business Information Systems and Computer Science classes at the university level in 2004. His instructional experience covers a broad selection of Information Systems topics, including systems analysis, database, programming, web and e-commerce technologies, hardware, software, and networking.

Mr. Bek's professional experience includes 14 years with a major oil company in a variety of IT-related roles and environments, including refining, marketing, retail operations, and corporate headquarter operations. He also spent 4 years in IT systems audit and control, serving as Senior IT Auditor for the California Institute of Technology, including NASA's Jet Propulsion Laboratory operated by Caltech under NASA contract. He served the Los Angeles Unified School District's Information Technology Division as a Senior Technical Project Manager, providing project management of various enterprise integrated application system projects for 6 years. An example is the Central Library Automated System (CLAS), which served over 600 school sites and 700,000 students.

Mr. Bek earned a Master of Science degree in Information Systems from the School of Business and Economics of the California State University, Los Angeles, a Baccalaureate of Science degree in Computer Science from the School of Natural and Social Sciences at that same institution, and an Associate of Science degree in Electronics Engineering Technology from ITT Technical Institute. Mr. Bek earned a Computer Information Systems Auditor certification in 2004 (not currently in practice), and a Certificate in On-line Teaching from Cerro Coso Community College. His interests include family, teaching, and continuous learning in the information and computer sciences, and educational technology.

Jon Bek currently serves as a tenure-track full-time faculty member in the Santa Barbara Computer Information Systems department. His most recent course assignments include introductory courses in CIS, Systems Analysis, SQL and Relational Database Management Systems, NoSQL Technologies, and beginning programming concepts.

Esther Frankel

Esther Frankel is a Professor and Department Chair of the Computer Information Systems Department at Santa Barbara City College. She has an A.B. from Barnard College, an M.A. in Music History and Theory from the University of Pennsylvania, and M.B.A. in Finance from Temple University.

Esther spent almost 20 years in the information technology field, starting her career as a programmer, and working in various capacities including system administration, database administration, and systems analysis. She worked in a variety of different organizations, and ran her own IT consulting business for approximately 6 years. Esther also has several years of experience in the health care industry.

Esther has been a faculty member at Santa Barbara City College since 1991. She began her career at the College as an adjunct faculty member, and was hired as a full-time faculty member

in 1997. She has been the Department Chair of the CIS Department since 1998. She currently teaches the transferable information technology introduction, Windows system administration, IT project management, as well as short courses in virtualization and cloud computing.

Victor Jadaon

Victor Jadaon, instructor in the Computer Applications & Web Technologies Department, came to College of the Canyons in 1994. He brought with him 25 years of teaching experience. He has taught in several colleges such as Los Angeles Valley College, Los Angeles Pierce College, Moorpark College, Glendale Community College, and Cal Lutheran University. Victor holds a Bachelor's degree in Computer Science as well as a Master's degree in Educational Technology. He teaches software applications such as Microsoft Office, Internet, Web Page Design, and operating systems. In addition to teaching, Victor worked in the computer field for many years.

Victor, along with his full-time faculty members, has created a new Non-Credit Digital Office Certificate program which was launched Fall 2016. The program is a complete success in part to Victor's teaching expertise, dedication, and tireless efforts to ensure the success of the students participating in the program.

Additionally, Victor continues to be actively involved with the exciting Health Care Information Technology certificate program by developing a course in Exploring Computers, which will be launched February 2017. This course will be offered to students throughout California.

From time to time, Victor trains employees from industry through College of the Canyon's Employment Training Institute, as well as conducting various staff development workshops in Word, Excel, and Access.

Kindness and real-world applications are practiced in Victor's classroom for students returning to school to sharpen existing skills or to learn new ones. Victor works hard every day to make his students feel comfortable in his classes.

In the past, Victor was involved with the A.L.I.V.E. committee here on campus. During that time, he taught seniors from the Senior Center of Santa Clarita. The seniors loved learning how to use the Internet and how to receive and to send email.

In addition to Victor's full-time teaching responsibilities at COC, his outside interests and hobbies include traveling, working at the computer, gardening, taking car trips, and spending time with his family.

Melanie Lipman

Melanie Lipman, Chair of the Computer Applications & Web Technologies Department, came to College of the Canyons in 1994 where she brought with her 20 years of teaching experience. She has taught in several colleges throughout her career, and found her home at COC. Melanie holds a Bachelor's degree in Business as well as a Master's degree in Educational Administration. In addition to her many duties as chair of the department, Melanie teaches applications such as Microsoft Office and operating systems.

Melanie, along with her full-time faculty members, has created a new Non-Credit Digital Office Certificate program which was launched Fall 2016. In addition, Melanie continues to be actively

involved with the exciting Health Care Information Technology certificate program by co-developing a course in Exploring Computers, which will be launched February 2017. This course will be offered to students throughout California.

In addition to Melanie's full-time teaching and chair responsibilities at COC, her outside interests and hobbies include traveling, taking car trips, and spending time with her family and beautiful granddaughter.

Safiah Mamoon

Safiah Mamoon is the Department Chair and Program Director of the Health Information Program (HIT) program at Saddleback College since 2013. She was hired as adjunct faculty at Saddleback in 2002 to teach in the Administrative Medical Assisting Program. She teaches various courses in the HIT program has been full-time faculty since 2011. She created the HIT program for Saddleback College and ensured its CAHIIM accreditation in October 2015. She led the effort of conversion of the program to fully online effective Fall 2016.

She holds a MS Health Informatics from National University, a BS Health from CMPH College, India, an AS Health Information Technology, Santa Barbara City College, and a Diploma Medical Assisting, Bryman College. She possess credentials Registered Health Information (RHIT) from AHIMA , Certified Professional Coder (CPC) from AAPC and Vocational Education Teaching Credential, Health Occupations, CSULB.

She was a recipient of Saddleback College's President's Award for Leadership and Innovation for the academic year 2015-2016. She currently serves on the CHIA's Academic Committee and its Legislative and Advocacy Committee. She also serves on the FDRG committee for creation of C-IDs through the Chancellor's Office.

Apart from Saddleback College, she taught at North Orange Regional Occupational Program (NOCROP) for about 12 years. In addition to HIT, her 22-year teaching experience includes Billing, Coding, Clinical and Administrative Medical Assisting, Health Unit Coordinator, Medical Terminology, Anatomy and Physiology.

Regina Roscigno

Regina Roscigno, adjunct instructor in the Computer Applications & Web Technologies Department, came to College of the Canyons in 2005. She began her career in teaching after returning to school to become marketable in a world taken over with technology. She decided to enter the world of Computer Information Technology, updating her previous managerial skills with today's technology. She has experience working in a Cerebral Palsy Center, Physical and Occupational Therapy departments in a Nursing Home, customer service assistant manager, and administrative assistant.

Regina holds an Associate's in Applied Science degree in Applied Mental Health Services from Sullivan County Community College, an Associate's in Science degree from College of the Canyons in Computer Information Technology, and a Bachelor of Science degree from Excelsior College in Computer Information Technology and Social Psychology. She presently teaches software applications such as Microsoft Office, operating systems, and Medisoft, a medical practice management system.

Early in her career as a teacher, Regina was involved with the Community Education Program at the College of the Canyons. During that time, she taught seniors, going to retirement homes and the Santa Clarita Community Center. The seniors enjoyed learning how to use the Internet, how to receive and send email and download attachments, and how to use MS Word.

Regina, along with her full-time faculty members, has created a new Non-Credit Digital Office Certificate program which was launched Fall 2016. In addition, Regina continues to be actively involved with the exciting Health Care Information Technology certificate program by developing a course in Healthcare Organization Procedures, which was launched February 2017. This course will be offered to students throughout California.

In addition to Regina's part-time teaching responsibilities at COC, her outside interests and hobbies include raising a variety of colorful finches, visiting wineries and wine collecting with her husband, traveling, spending time with her family, and taking care of her little Yorkie, Twinkie.

Course – Medical Terminology

This course introduces administrative medical office procedures, including medical ethics, legal responsibilities and appropriate communications skills. Medical office software for completing such tasks as patient registration, records, appointment scheduling, and billing and collection is also examined.

Goal: Determine use of medical symbols, medical terminology, communication techniques, ethics and legal responsibilities, as well as medical office software required for billing and record management.

Course Objectives:

Upon completion of this course, the learner will be able to:
1. Discuss the history of medical clerical work.
2. Analyze medical ethics and legal responsibilities.
3. Examine the use of medical terminology.
4. Analyze interaction with patients and coworkers.
5. Describe reception techniques.
6. Compare and contrast different forms of written communications.
7. Explain the typical sections found within a patient's medical record.
8. Differentiate technologies used the medical office.
9. Describe health insurance procedures used in a medical office.
10. Assess daily financial responsibilities.
11. Plan office maintenance and management.

Course - Exploring Computers

This course is designed to afford the learner the opportunity to acquire basic digital office technology skills used in the modern office, including those related to computer processes, internet technologies, social media, word processing, spreadsheets, relationship databases, and communication software such as e-mail, presentation and information dissemination applications. The course is intended for those seeking entry-level clerical office positions in a modern medical health setting.

Goal: The learner will examine the basics of computer operations, file management, storage devices, the Internet, and software.

Course Objectives:

Upon completion of this course, the learner will be able to:
1. Explain the components of a computer.
2. Compare and contrast methods of searching for information on the World Wide Web.
3. Evaluate the key features of widely used business programs.
4. Differentiate among the various types of memory, ports, and connectors of the CPU.
5. Explain input and output devices.
6. Classify storage devices.
7. Explain the importance of file and folder management.

Recommended Textbook:

Beskeen, D. W., Duffy, J., Friedrichsen, L., & Reding, E. E. (2014). *Microsoft Office 2013 for*

    Medical Professionals. Stamford, CT: Cengage Learning.

Course - Exploring Computers

Health Care Information Technology Model Curriculum

Module 1: Basic Fundamentals of the Computer

Goal Statement: Upon completion of this module, the learner will be able to:
At the completion of this module, students will be able to demonstrate the proper use of computer operations, file management, storage devices, and software.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Distinguish between servers, laptops, desktops, and tablets.
2. Describe the relationship between data and information.
3. Explain the difference between system software and application software.
4. Explain and demonstrate input, output, storage devices:
5. Create and manage file and folders.

Key Terms to Use:

Application software	Keyboard	Save as
Clipboard	Laptop	Servers
Cloud	Memory storage	Software
Data	Mouse	Spyware
Default	Microphone	Storage devices
Desktop	Monitors	Tablet
Dialog box	Netbook	Utility programs
Digital camera	Operating systems	USB hard drive
Files	Output devices	Viruses
Firewall	Pointing devices	
Flash drive	Ports	
Folders	Processor	
Hard disk drive	Printers	
Hardware	Right-click menu	
Information	Scanners	
Input devices	Save	

Content Outline*	Suggested Activities
Objective 1. Distinguish between servers, laptops, desktops, and tablets.	Lecture/Discussion Compose a one-page essay describing the differences between a server, a laptop, a desktop, and a tablet.

Course - Exploring Computers

	Check the Internet to compare prices of the devices. Present your findings to the class.
Objective 2. Describe the relationship between data and information.	Lecture/Discussion Compose one or two paragraphs offering examples of inputting data to produce information. Use a health care setting.
Objective 3. Explain the difference between system software and application software.	Lecture/Discussion List examples of operating systems. List examples of application software.
Objective 4. Explain and demonstrate input, output, storage devices:	Lecture/Discussion Define the following: input device, output device, and storage device and give examples of each. List hardware components and the purpose of each component. List examples of software. Navigate the Desktop and identify the parts of the Taskbar. Explain the purpose of the components of the taskbar.
Objective 5. Create and manage file and folders.	Lecture/Discussion Manipulate opening, closing, and resizing windows. Create a new folder on the desktop. Name the folder Module 1. Save 3 previous assignments in the Module 1 folder. Move the Module1 folder to your flash drive. Rename the folder on your flash drive.

Course - Exploring Computers

Module 2: The Internet

Goal Statement: At the completion of this module, the learner will able to describe the Internet and examine its uses to explore online resources, search operations, and web application.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Explain the history of the Internet.
2. Describe the features of browsers and identify the components of a web address.
3. Compose an effective search text.
4. Discuss uses of various types of search engines.
5. Discuss digital security and risks.
6. Describe the various types of Internet and network attacks.
7. Discuss techniques to prevent unauthorized computer access and use.
8. Identify safe guards and risks associated with wireless communications.
9. Explain the use of digital signatures.
10. Discuss issues surrounding patient information privacy.

Key Terms to Use:

Browser	Internet protocol (IP)	The Internet
Digital signature	Internet service provider (ISP)	The Web
Domain name	Key words	Upload
Download	Metasearch engine	USENET
HTML	Podcast	Web page
Home page	Search engine	Website
Hyperlink	Semantic	Web address locator (URL)
Hypertext	The Cloud	

Objective 1. Explain the history of the Internet.	Lecture/Discussion
A. Discuss the Internet and its evolution. B. History: The origins of the Internet date back nearly 40 years, with the U.S. military's funding of a research network dubbed Arpanet in 1969. C. Services on the Internet: E-mail, FTP, WWW, etc.	Compose a one page paper that describes the history of the Internet and identify reasons why people use the Internet. Print a website of your choice.

Course - Exploring Computers

Objective 2. Describe the features of browsers and identify the components of a web address.
 	
A. Explain Web Browsers
   1. A browser is a software application used to locate, retrieve and display content on the World Wide Web.
B. Discuss the parts of the URL
   1. http
   2. colon (:)
   3. //
   4. Domain
   5. Folder
   6. File
	Lecture/Discussion
	
	List the differences between the most popular browsers.
	
	Give an example of a URL.
	
	Describe features of browsers and identify the components of a web address.

Objective 3. Compose an effective search text.
 	
A. Discuss effective search techniques and the importance of using appropriate key words.
   1. Quotation marks
   2. Wildcards
B. Use a variety of browsers
   1. Internet Explorer
   2. Firefox
   3. Google
   4. Chrome
	Lecture/Discussion
	
	Perform a basic web search for doctors who have a specialty of cardiology.
	
	State your search keywords and include the website address in your paper.

Objective 4. Discuss uses of various types of search engines.
 	
A. Introduce and review search engines
B. Describe search engines and types
C. Search engines
   1. Google
   2. Bing
   3. Yahoo
   4. Ask
	Lecture/Discussion
	
	Use a search engine of your choice to search for information about a medical condition such as sinus problems.

Objective 5. Discuss digital security and risks.
 	
A. Discuss the following:
   1. Firewall
   2. Antivirus
B. Risks
   1. Spyware
   2. Adware
   3. Malware
	Lecture/Discussion
	
	Explain what security tools.
	
	List some techniques to prevent unauthorized computer access and use.
	
	Have students explain how computer users fall prey to risks.

Course - Exploring Computers

Objective 6. Describe the various types of Internet and network attacks.
 	
A. Internet attacks:
   1. Socially engineered Trojans
   2. Unpatched software
   3. Phishing
   4. Network traveling worms
B. Confirm validity of email attachments.
	Lecture/Discussion
	
	Use a search engine to find information on how you can protect yourself against Internet and network attacks.
	
	Compose a short essay defining phishing, traveling worms, and Trojans.

Objective 7. Discuss techniques to prevent unauthorized computer access and use. A. Clicking unknown links in emails B. Never open unknown attachments C. Do not give out personal information over the phone or in an unauthorized email. D. Source: http://www.dhs.gov/how-do-i/protect-myself-cyber-attacks	Lecture/Discussion List steps you will take in your home or the office to prevent unauthorized computer access. Create a strong password that you think will keep your office computer free from unauthorized access.

Objective 8. Identify safe guards and risks associated with wireless communications.
 	
A. Discuss anti-virus programs:
   1. MCAfee©
   2. Bitdefender©
   3. Norton©
   4. Zone Alarm©
   5. Additional popular programs
B. Risks
   1. Hackers accessing the files
   2. Hackers can destroy the system
C. Source: http/www.10antivirussoftware.com
	Lecture/Discussion
	
	Explain why a virus can be harmful to a computer. Write a short essay.
	
	List several popular anti-virus programs available. State the price of the program as well as its ranking of protection.

Objective 9. Explain the use of digital signatures.
 	
A. Discuss digital signatures:
   1. Digital signature
   2. Digital certificate
B. Secure site (message encryption)
	Lecture/Discussion
	
	Have students create a digital signature certificate.

Objective 10. Discuss issues surrounding patient information privacy.
 	
A. Discuss the importance of patient privacy policies
   1. The Health Insurance Portability and Accountability Act
   2. HIPAA Privacy Rule—The Patient Safety and Quality
	Lecture/Discussion
	
	Compose an essay to explain the two important patient privacy rules: HIPAA and PSQIA.

Course - Exploring Computers

Improvement Act of 2005 (b)(PSQIA) Patient Safety Rule Encryption 3. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy, Security and Breach Notification Rules	
Objective 11. Save, upload, and download information from the Cloud. A. Cloud is online storage B. Save, upload, and download from the Cloud	Lecture/Discussion Students will create a Cloud account, if they do not have one. Students will upload and download files.

Course - Exploring Computers

Module 3: Social Media

Goal statement: At the completion of this module, students will be able to discuss and apply ways in which social media technologies are used by individuals, educators, corporations, organizations, and examine related ethical issues.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Understand the social web media sensation.
2. Explain the advantages and risks of using online social networks.

Key Terms to Use:

Bio	Blog	Chat
Facebook	Forums	Instagram
LinkedIn	Live broadcasts	Mashup
Media sharing	Messaging	Microblogging
Social	Open content	Pinterest
Preferences	Profile	Search tools
Social bookmarking	Social journaling	Social mobile media
Social networking	Social web phenomenon	Text messaging
Twitter	Wikis	

Objective 1. Understand the social web media sensation. A. Discuss the pros of using social media 　　1. Facebook 　　2. LinkedIn 　　3. You Tube 　　4. Twitter 　　5. Blogs 　　6. Messaging B. Discuss the cons of using social media 　　1. Facebook 　　2. LinkedIn 　　3. You Tube 　　4. Twitter 　　5. Blogs 　　6. Messaging	Lecture/Discussion Compose a short essay stating the differences between Facebook and Twitter. What are the advantages of using social media?
Objective 2. Explain the advantages and risks of using online social networks.	Lecture/Discussion Write a short essay

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A. Discuss the cons of using social networks (e.g. Facebook):
  1. Lack of privacy, not using Facebook
  2. List feature
  3. Time consuming.
	explaining what are the disadvantages of using social media, such as lack of privacy and putting facts out there about yourself that you might not want a future employer to know?
	
	Is it a good idea to use social media for personal use while working?
	
	Is it a good idea to create a Facebook account for the office?

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Module 4: Word Processing

Goal Statement: At the completion of this module, students will be able to use basic word processing skills, such as creating, saving, editing, formatting documents, printing, and checking the accuracy of document content to create professional business documents.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Use the Word interface to create, save, and print documents.
2. Edit, spell check, grammar check, and format characters and paragraphs, and headers and footers.
3. Demonstrate document enhancements.

Key Terms to Use:

Alignment	Autocorrect	Autofit
Automatically Updated Properties	Block Style Letter	Body Copy
Bold	Bulleted List	Center Align
Centered	Character Formatting	Color Scheme
Document Properties	Download	Drag And Drop
Drag-And-Drop Editing	Find And Replace	Font
Font Size	Footer	Format
Formatting Mark	Hard Page Break	Hardcopy
Header	Headline	Insert Mode
Italic	Left Align	Left-Aligned
Line Spacing	Memo	Non Printing Characters
Normal Style	Numbering	Page Layout View
Paragraph Formatting	Point	Print Layout View
Print Preview	Printout	Resizing
Right Align	Scroll	Section Break
Selection Rectangle	Shade	Signature Line
Sizing Handles	Soft Page Break	Spelling And Grammar Check Icon
Standard Properties	Style	Tab
Tables	Template	Text Wrapping
Theme	Theme Colors	Underlined
Virus	Word Wrap	

10

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Objective 1. Use the Word interface to create, save, and print documents. A. Navigate and define the Word interface B. Create a new Word document C. Theme colors D. Save a file E. Use Save As F. Printer options G. Create and explain the parts of block style business letters, modified block style business letters H. Change margins I. Page orientation	Lecture/Discussion Create a new Word document that defines the parts of a block style business letter. Format the document according to style format guide. Save the letter to your flash drive. Create a modified block style business letter. Format the document according to style format guide. Save the letter to your flash drive. Print the letters.

Objective 2. Edit, spell check, grammar check, and format characters and paragraphs, and headers and footers.
 	
A. Online templates
B. Spell-, and grammar check
C. Auto-correct
D. Word dictionary
E. Thesaurus
F. Word Count
G. Track changes
H. Generate other documents
   1. Envelope
   2. Memo
   3. Fax cover sheet
   4. Cover letter
	Lecture/Discussion
	
	Create additional documents using Word online templates to create documents such as a memo, a fax cover sheet and a cover letter.
	
	Use spell check and grammar check when necessary.
	
	Format characters and paragraphs where needed Add a header or footer. Save and print the documents.

Objective 3. Demonstrate document enhancements.
 	
A. Demonstrate document enhancing techniques such as those listed:
   a. Headers
   b. Footers
   c. Tables
	Lecture/Discussion
	
	Use a Word template to create a flyer for a medical office. Search the Internet for appropriate pictures. Use spell-check and grammar-

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d. Graphics e. Bullets f. Page borders g. Numbering	check. Add an online picture and bullets or numbering, change theme colors Add a decorative page border Save and print the document.

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Module 5: Spreadsheets

Goal statement: At the completion of this module students will be able to analyze the features of Microsoft Excel that are necessary to create professional spreadsheets.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Use the Excel interface to create, customize, save, and print spreadsheets.
2. Edit and format worksheet components and data.
3.
4. Give examples of various procedures
5. Discuss how office procedures may be modified depending upon the type of healthcare practice

Key Terms to Use:

auto calculate area	auto correct feature	automatically updated properties
bold	cancel box	category names
chart sheet	copy area	data series
destination area	document properties	edit mode
enter box	equal sign	fill handle
font	font color	font size
font style	format	hard copy
in-cell editing	Insert mode	insertion point
merging	minus sign	number
overtype mode	paste area	point size
printout	range	relative reference
select	source area	splitting
standard properties	SUM function	text
3-D Pie chart	Active cell	Column headings
row headings	Conditional formatting	Range
fill handle	Gridlines	templates
Workbook		

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Objective 1. Use the Excel interface to create, customize, save, and print spreadsheets.
 	
A. Explain and demonstrate
    1. Navigate and define the Excel interface
    2. Parts of the worksheet
    3. Enter text and numbers
    4. Create a new worksheet
    5. Simple functions
    6. Save a file
    7. Use Save As
    8. Printer options
    9. Values version
    10. Formulas version
    11. Auto Calculate
    12. AutoSum
    13. Merge and center
	Lecture/Discussion
	
	Create a simple Excel spreadsheet listing the office supplier contact information.
	
	Find items to purchase and price information.
	Search the Internet for examples of vendors.
	
	Add a title
	
	Determine the quantities of items and compute totals.
	Print the formulas version

Objective 2. Edit and format worksheet components and data. A. Formats: currency, comma, and percentage B. Cell styles C. Increase & decrease decimals D. Headers E. Charts (embedded & as new sheet) F. Apply a style to the chart G. Height and width of columns and rows.	Lecture/Discussion Open the Excel spreadsheet you created in the previous assignment. Format the values, add a heading style to the column headings, bold and italicize the row headings, apply a total cell style to the totals, and add a header. Rename and change the sheet tab color to standard color red. Create a 3-D pie chart as a new sheet. Add a style to the chart. Save and print the worksheet.

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Module 6: Databases

Goal Statements: At the completion of this module, students will be able to analyze their basis features of Microsoft access to create a variety databases.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Use the Access interface to create, save, manipulate, and print data from a variety of Access objects.
2. Perform special database operations.

Key Terms to Use:

Application software	Hard disk drive	Save
Clipboard	Hardware	Save as
Data	Information	Servers
Default	Input devices	Software
Desktop	Laptop	Spyware
Dialog box	Netbook	Storage devices
Digital camera	Operating systems	Tablet
Files	Output devices	Utility programs
Firewall	Ports	Viruses
Flash drive	Processor	
Folders	Right-click menu	

Objective 1. Use the Access interface to create, save, manipulate, and print data from a variety of Access objects.
A. Define and navigate the Access window:
   1. Access views
   2. Define the objects
   3. Define records
   4. Define fields
B. Create Access objects:
   a. Tables
   b. Queries
   c. Forms
   d. Reports
	Lecture/Discussion
	
	 Create a two table database.
	a. Create two tables
	b. Create a simple query
	c. Create a simple form
	d. Create a report

Objective 2. Perform special database operations.
A. Explain and demonstrate:
   a. Compact a database
   b. Repair a database
   c. Backup a database
	Lecture/Discussion
	
	Compact, repair, and back up your database.

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Module 7: Presentation

Goal Statement: At the completion of this module, students will be able to evaluate the features of Microsoft PowerPoint used to create a variety of slide presentations.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Use the PowerPoint interface to create, save, modify, and print presentations.
2. PowerPoint views
3. Customize PowerPoint presentations.
4. Print presentations and options.

Key Terms to Use:

Access work area	automatically updated properties	backup copy
caption	column headings	compact
Currency (data type)	data type	database
database design	database management system	database properties
datasheet	Datasheet view	Date & Time (data type)
description	Design view	field
form	Form view	Format characters
Forms	hard copy	landscape orientation
layout	Navigation buttons	Navigation Pane
Number (data type)	object tabs	Objects tab
one-to-many relationship	portrait orientation	primary key
Print preview	printout	queries
Queries	records	recover
redundancy	relational database	relationships
Reports	resizing	row selector
run	save copy	Short Text (data type)
status bar	tables	unique identifier
wizard		

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Objective 1. Use the PowerPoint interface to create, save, modify, and print presentations. A. Define and demonstrate: 1. Navigate the PowerPoint window 2. Layouts 3. Placeholders 4. Document theme 5. Graphics 6. Word processing features 7. Slide arrangement 8. View a presentation	Lecture/Discussion Create a simple PowerPoint slide presentation. Run the slide show. Print the slides. Save the presentation.
Objective 2. PowerPoint views A. Review and discuss the various viewing options. 1. Normal view 2. Thumbnail view 3. Outline view 4. Slide sorter view 5. Reading view	Lecture/Discussion Create a PowerPoint presentation. Practice changing to different views. Save and print the slides
Objective 3. Customize PowerPoint presentations. A. Review and demonstrate customizing options. 1. Format characters 2. Add graphics 3. Animations 4. Transitions 5. Duplicate a slide 6. Header and footer	Lecture/Discussion Create a PowerPoint slide presentation using the custom options.
Objective 4. Print presentations and options. A. Explain and demonstrate. 1. Printing pure black & white 2. Print Slides in landscape orientation 3. Handouts (vertical or horizontal) 4. Outline 5. Number of slides on each handout	Lecture/Discussion A. Create a PowerPoint presentation. B. Print the presentation slides in landscape C. Number the slides D. Print handouts E. Print an outline F. Save the presentation

Course - Exploring Computers

Module 8: Outlook

Goal Statement: At the completion of this module, students will be able to explain the relevance of Microsoft Outlook tools in the work environment.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Use the Outlook interface to create, save, and print documents, and customize settings.
2. Compose and manage e-mail settings.
3. E-mail etiquette
4. Demonstrate the use of enhanced Outlook features such as calendar and address book.
5. Archive e-mail.

Key Terms to Use:

Accept a meeting request	Active appointments window	Address book
Archive mail	Attachment	BCC
Calendar permissions	Cancel a meeting	Contact groups
Contacts	Contacts folder	Create an appointment
E-mail etiquette	Folder lists	Forward
New signature dialog box	Out of office assistant	Outlook calendar
Outlook interface	Schedule a meeting	Set a reminder
Shortcuts	Task Window	Tasks

Objective 1. Use the Outlook interface to create, save, and print documents, and customize settings. A. Define the parts of the Outlook interface and demonstrate their use. B. Demonstrate how to perform a variety of tasks using Outlook.	Lecture/Discussion Create an Outlook account. Configure the Outlook account options.
Objective 2. Compose and manage e-mail settings. A. Create an email message with students and build a contact list. B. Discuss attachments C. Print an message	Lecture/Discussion Create an email message. Print and save message Create your own contact list Attach a file to an email

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Objective 3. E-mail etiquette
 	
A. Define rules for email etiquette:
    1. Do not use all capital letters (shouting)
    2. BCC recipients or use mail merge
    3. Don't use email to discuss confidential information
    4. Take care with abbreviations and emoticons
    5. Don't request delivery and read receipts
B. Source: ITBusinessEdge, 2015
	Lecture/Discussion
	
	Write a brief essay discussing why it is important to use proper email etiquette.

Objective 4. Demonstrate the use of enhanced Outlook features such as calendar and address book.
 	
A. Explain and demonstrate outlook features.
    1. Create a calendar
        a. Merge
    2. Create an address book
        a. Merge
	Lecture/Discussion
	
	Create an event.
	
	Build an address book

Objective 5. Archive e-mail. A. Define archive mail. B. List the steps to archive the mail	Lecture/Discussion Archive the mail and copy the archived files to your flash drive.

Course - Exploring Computers

Course – Structure Query Language (SQL) for Healthcare IT

This course is designed to complement the Healthcare Information Technology course with focus on programming in SQL and creating basic procedures and functions in MySQL contextualized for health care. It was designed for students and professionals seeking MySQL certification.

Goal: Use SQL to retrieve, insert, update, and delete information from relational databases. Create row and aggregate functions, inner and outer joins, set operations, subqueries and parameter queries.

Course Objectives:

Upon completion of this course, the learner will be able to:
1. Use the select, insert, update, and delete statements to manage data.
2. Maintain data integrity.
3. Use row functions to transform data and aggregate functions to group and summarize data.
4. Create inner, outer, cross, and self-joins.
5. Implement set operations (union, intersection, minus).
6. Perform subqueries and parameter queries.

Recommended Textbook:

Pratt, P. J., & Last, M. Z. (2015). *A guide to SQL* (9th ed.). Boston, MA: Cengage Learning.

Course - Structure Query Language (SQL) for Healthcare IT

Module 1: Introduction to SQL and Creating Tables

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Run SQL commands and save them in a file.
2. Create tables with specific data types.
3. Understand and use nulls.
4. Add rows to tables.
5. View table data.
6. Correct errors in a table.

Key Terms to Use:

Database	Fields	Null
Records	Relational Database	Tables

Content Outline	Suggested Learning Activities
Objective 1: Run SQL commands and save them in a file.	Lecture / discussion / demonstration Discussions: Report on SQL installation Assignment: Install SQL and test installation by running SQL queries
Objective 2: Create tables with specific data types.	Lecture / discussion / demonstration Discussions: share / practice create table examples, review questions. Assignment: Create a patient table.
Objective 3: Understand and use nulls.	Lecture / discussion / demonstration Assignment: Add null values to patient table.
Objective 4: Add rows to tables.	Lecture / discussion /

Course - Structure Query Language (SQL) for Healthcare IT

	demonstration Assignment: Add new patient data to patient table.
Objective 5: View table data.	Lecture / discussion / demonstration Discussions: share / practice view table examples, review questions. Assignment: View patient table.
Objective 6: Correct errors in a table.	Lecture / discussion / demonstration Assignment: Update one field in patient table.

Course - Structure Query Language (SQL) for Healthcare IT

Module 2: Single-Table Queries (Part 1)

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Retrieve data using SQL.
2. Use simple conditions, compound conditions, and Boolean operators using SQL.
3. Sort data in a table.

Key Terms to Use:

Boolean Operator	Condition	Relational Operator
Selection Criteria	Sorting	

Content Outline	Suggested Learning Activities
Objective 1: Retrieve data using SQL.	Lecture / discussion / demonstration Discussions: share / practice sample queries, review examples. Assignment: Retrieve all patient data.
Objective 2: Use simple conditions, compound conditions, and Boolean operators using SQL.	Lecture / discussion / demonstration Discussions: share / practice queries with condition and Boolean operator examples, review questions. Assignment: Retrieve different combinations of patient data, such as patients of a certain age or gender.
Objective 3: Sort data in a table.	Lecture / discussion / demonstration Assignment: Sort patient data by zip code.
Module 1-2 Objectives	Quiz on modules 1-2

Course - Structure Query Language (SQL) for Healthcare IT

Module 3: Single-Table Queries (Part 2)

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Use aggregate functions and subqueries in a query.
2. Group data using the "group by" clause.
3. Select individual groups of data using the "having" clause.
4. Use computed columns in queries.

Key Terms to Use:

Aggregate	Computed Data	Function
Grouping	Subquery	

Content Outline	Suggested Learning Activities
Objective 1: Use aggregate functions and subqueries in a query.	Lecture / discussion / demonstration on subqueries, aggregate functions and counting. Discussions: share / practice aggregate functions and subqueries examples, review questions. Assignment: Write a query using subqueries and an aggregate function.
Objective 2: Group data using the "group by" clause.	Lecture / discussion / demonstration Assignment: Write a query to display patients by lab test.
Objective 3: Select individual groups of data using the "having" clause.	Lecture / discussion / demonstration

Course - Structure Query Language (SQL) for Healthcare IT

Objective 4: Use computed columns in queries.	Lecture / discussion / demonstration Assignment: Write a query to display total number of visits / admissions by ICD code.

Course - Structure Query Language (SQL) for Healthcare IT

Module 4: Multiple-Table Queries

Module Objectives:
Upon completion of this module, the learner will be able to:
1. Use joins to retrieve data from more than one table.
2. Use the "in", "exists", "all" and "any" operators in a query.
3. Use a subquery with a subquery.
4. Use an alias.
5. Perform set operations.

Key Terms to Use:

Alias	Join	Set Operations

Content Outline	**Suggested Learning Activities**
Objective 1: Use joins to retrieve data from more than one table.	Lecture / discussion / demonstration Discussions: share / practice join query examples, review questions. Assignment: Write a query to display ICD codes by patient.
Objective 2: Use the "in", "exists", "all" and "any" operators in a query.	Lecture / discussion / demonstration Discussions: share / practice "in", "exists", etc. operator query examples, review questions.
Objective 3: Use a subquery with a subquery.	Lecture / discussion / demonstration Assignment: Write a query to select patients who have not had lab tests.

Course - Structure Query Language (SQL) for Healthcare IT

Objective 4: Use an alias.	Lecture / discussion / demonstration
Objective 5: Perform set operations	Lecture / discussion / demonstration Assignment: Write a query to select patients who have been admitted, but who have not had lab tests.
Module 3-4 Objectives	Quiz on modules 3-4

Course - Structure Query Language (SQL) for Healthcare IT

Module 5: Updating Data

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Create and drop tables.
2. Add, change, and delete data in a table.
3. Change the structure in an existing table.
4. Use the commit and rollback commands.

Key Terms to Use:

Commit	Rollback	Transaction

Content Outline	Suggested Learning Activities
Objective 1: Create and drop tables	Lecture / discussion / demonstration
Objective 2: Add, change, and delete data in a table	Lecture / discussion / demonstration
Objective 3: Change the structure in an existing table	Lecture / discussion / demonstration Assignment: Change the structure of the patient table.
Objective 4: Use the commit and rollback commands	Lecture / discussion / demonstration Discussions: share / practice commit / rollback examples, review questions.

Course - Structure Query Language (SQL) for Healthcare IT

Module 6: Database Administration

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Using views.
2. Grant and revoke user database privileges.
3. Create, use, and drop an index.
4. Understand and obtain information from the system catalog.
5. Use integrity controls to control data entry.

Key Terms to Use:

Index	Integrity Control	Privilege
System Catalog	View	

Content Outline	Suggested Learning Activities
Objective 1: Using views.	Lecture / discussion / demonstration Discussions: share / practice views that would be helpful to organization, review questions. Assignment: Write a query to update a view created in a previous assignment.
Objective 2: Grant and revoke user database privileges.	Lecture / discussion / demonstration
Objective 3: Create, use, and drop an index.	Lecture / discussion / demonstration Discussions: share / practice index examples, review questions. Assignment: Add an index to the patient table.
Objective 4: Understand and obtain information from the system catalog.	Lecture / discussion / demonstration Discussions: share /

Course - Structure Query Language (SQL) for Healthcare IT

	practice sample data from system catalog.
Objective 5: Use integrity controls to control data entry.	Lecture / discussion / demonstration Assignment: Create an integrity control to check patient data by gender.
Module 5-6 Objectives	Quiz on modules 5-6

Course - Structure Query Language (SQL) for Healthcare IT

Health Care Information Technology Model Curriculum

Module 7: SQL Functions

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Understand how to use various functions in queries.
2. Perform date calculations.
3. Use concatenation in a query.

Key Terms to Use:

Concatenation	Function	

Content Outline	Suggested Learning Activities
Objective 1: Understand how to use various functions in queries.	Lecture / discussion / demonstration Discussions: share / practice a "valuable" stored procedure for an organization, review questions.
Objective 2: Perform date calculations	Lecture / discussion / demonstration Assignment: T-SQL function to add days to date
Objective 3: Use concatenation in a query.	Lecture / discussion / demonstration

Module 8: Embedded SQL

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Embed SQL commands in T-SQL procedures.
2. Use triggers.

Key Terms to Use:

Procedure	Trigger	

Content Outline	**Suggested Learning Activities**
Objective 1: Embed SQL commands in T-SQL procedures.	Lecture / discussion / demonstration Discussions: share / practice use of SQL commands in procedures, review questions. Assignment: write T-SQL query to retrieve, add, update, and delete data from table.
Objective 2: Use triggers.	Lecture / discussion / demonstration
All module objectives	Comprehensive Final Exam

Course - Structure Query Language (SQL) for Healthcare IT

Course - Business Intelligence Tools and Reporting

Implementing and designing business intelligence solutions with Microsoft SQL Server. This course is contextualized to the healthcare work environment to provide occupational preparation for information systems professionals, such as PC support personnel, computer programmers, network/systems managers, and related technical and operations administration personnel,

Goal: The learner will develop database-independent reports using business intelligence reporting tools.

Course Objectives:

Upon completion of this course, the learner will be able to:
1. Create reports using a business intelligence tool in a variety of different formats, including graphical formats.
2. Demonstrate the ability to work with a variety of data sources using a business intelligence tool.
3. Utilize formulas in reports.
4. Create cross-tab and drill-down reports.

Recommended Textbook:

Murphy, I. E. (2016). *Learning SAP crystal reports 2016 made easy*. Teaneck, NJ: Tolana

Publishing.

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Module 1: Introduction to Business Intelligence Reporting Tools

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Distinguish various business intelligence reporting tools.
2. Demonstrate the ability to use the interface of one reporting tool, including toolbars, menu items, and help.
3. Customize the reporting environment.
4. Apply reporting tool terminology.

Key Terms to Use:

Footer	Header	Menu item terms
Product-specific toolbars	Report Detail	

Content Outline	Suggested Learning Activities
Objective 1: Distinguish various business intelligence reporting tools.	Lecture / discussion Discussion: Report on one business intelligence tool.
Objective 2: Demonstrate the ability to use the interface of one reporting tool, including toolbars, menu items, and help.	Lecture / demonstration Assignment: Create folder environment for reports.
Objective 3: Customize the reporting environment.	Lecture / discussion / demonstration Discussion: share / practice examples of reporting environment customizations. Assignment: Customize the reporting tool
Objective 4: Apply reporting tool terminology.	Lecture / discussion Discussion: share / practice examples of simple reports. Assignment: Create a simple report of physicians using a wizard

Module 2: Introduction to Business Intelligence Reporting Tools

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Create reports without a simple wizard.
2. Add and remove database tables from a report.
3. Arrange items on the report page.
4. Edit and format reports.

Key Terms to Use:

Data Source	Data Types	Data Warehouse
Index	Key	Open Database Connectivity (ODBC)
Operational Data Store	Relational Join	Report Object
Table		

Content Outline	Suggested Learning Activities
Objective 1: Create reports without a simple wizard.	Lecture / discussion / demonstration Discussion: share / practice examples of reports Assignment: Create a report using multiple tables such as report of patient appointments.
Objective 2: Add and remove database tables from a report.	Lecture / demonstration Assignment: Create a report using multiple tables such as a report of patient appointments.
Objective 3: Arrange items on the report page.	Lecture / discussion / demonstration Discussion: share / practice examples of different report arrangements. Assignment: Create a patient report with various report objects in different positions.

Course - Business Intelligence Tools and Reporting

Objective 4: Edit and format reports.	Lecture / demonstration Assignment: Create a patient payment report with various data items formatted, such as currency and date formats.
	Quiz on modules 1 and 2

Course - Business Intelligence Tools and Reporting

Module 3: Report Subsections and Formatting

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Connect to various data sources.
2. Create a report with subsections.
3. Add non-database fields such as page numbers.

Key Terms to Use: (product-dependent)

Conditional Breaks	Conditional Formatting	Grand Totals
Grouping	Subreports	Subsections
Subtotals	Suppressed Report Elements	Special Fields
String Operations		

Content Outline	Suggested Learning Activities
Objective 1: Connect to various data sources.	Lecture / discussion / demonstration Discussion: Report on ways to connect to various data sources. Assignment: Create a report by connecting to various data sources.
Objective 2: Create a report with subsections.	Lecture / discussion / demonstration Discussion: share / practice examples of practical reports for an organization that include subsections. Assignment: Create a patient list report with subsections.
Objective 3: Add non-database fields such as page numbers.	Lecture / demonstration Assignment: Add non-database fields to the patient report.

Course - Business Intelligence Tools and Reporting

Module 4: Selecting Records

Module Objectives:
> Upon completion of this module, the learner will be able to:
> 1. Use select commands in a report.
> 2. Use operators with a select statement in a report.
> 3. Modify and delete selection criteria.
> 4. Understand case-sensitivity in a BI reporting tool.

Key Terms to Use:

Boolean Operators	Case Sensitivity	Data Operations
Relational Operators	Selection Criteria	Wildcard

Content Outline	Suggested Learning Activities
Objective 1: Use select commands in a report.	Lecture / discussion / demonstration Discussion: share / practice examples of various select commands. Assignment: Create a patient report using a select command.
Objective 2: Use operators with a select statement in a report.	Lecture / discussion / demonstration Discussion: share / practice examples of using operators in a report. Assignment: Create a patient report for only one physician.
Objective 3: Modify and delete selection criteria.	Lecture / demonstration Assignment: Change one of the the patient reports to list patients who are born after a certain year.
Objective 4: Understand case-sensitivity in a BI reporting tool.	Lecture / demonstration
	Quiz on modules 3 and 4

Course - Business Intelligence Tools and Reporting

Module 5: Grouping, Sorting, Summarizing

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Group records in a report.
2. Sort records in a report.
3. Summarize data in a report.
4. Create drill-down and cross-tab reports.
5. Create custom groups.

Key Terms to Use:

Cross-Tab Report	Custom grouping	Drill-Down Report
Grouping	Sorting	Statistical Operations: average, maximum, minimum, standard deviation
Summarizing		

Content Outline	Suggested Learning Activities
Objective 1: Group records in a report.	Lecture / discussion / demonstration Discussion: share / practice examples of practical applications of record grouping. Assignment: Create a patient report that groups patients by ICD code.
Objective 2: Sort records in a report.	Lecture / demonstration Assignment: Sort the patient report by branch office.
Objective 3: Summarize data in a report and create drill-down reports.	Lecture / demonstration Assignment: Create a report that totals patient payments for the year.
Objective 4: Create drill-down and cross-tab reports.	Lecture / discussion /

Course - Business Intelligence Tools and Reporting

	demonstration Discussion: share / practice examples of cross-tab reports in different organizations Assignment: Create a drill-down report of payments by insurer.
Objective 5: Create custom groups.	Lecture / demonstration Assignment: Create a report that organizes patient payments by month.

Course - Business Intelligence Tools and Reporting

Module 6: Report Wizards and Exporting Reports

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Create a report using the report wizard.
2. Understand the various report wizard options.
3. Export a report into various file types.

Key Terms to Use:

Automatic Report Generation/ Report Wizard	File Types	

Content Outline	Suggested Learning Activities
Objective 1: Create a report using the report wizard.	Lecture / demonstration Assignment: Create a physician report using the report wizard.
Objective 2: Understand the various report wizard options.	Lecture / discussion / demonstration Discussion: share / practice examples of report wizard options Assignment: Modify the physician report to group by department.
Objective 3: Export a report into various file types.	Lecture / discussion / demonstration Discussion: share / practice experiences exporting reports into different file types. Assignment: Export the physician report into PDF format.
	Quiz on modules 5 and 6

Course - Business Intelligence Tools and Reporting

Module 7: Formulas and Reports in Reporting

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Distinguish between formulas and functions.
2. Write correctly-formatted formulas and functions in a report.
3. Create a report in the form of a chart.

Key Terms to Use:

Chart Types	radar	Bubble
numeric axis	histogram	
Formula	Function	Stored Procedures
User-Defined Function		

Content Outline	Suggested Learning Activities
Objective 1: Distinguish between formulas and functions.	Lecture / demonstration Discussion: share / practice examples of formulas and functions.
Objective 2: Write correctly-formatted formulas and functions in a report.	Lecture / demonstration Assignment: Create a report calculating percentages of insurance payments for appointments. .
Objective 3: Create a report in the form of a chart.	Lecture / discussion / demonstration Discussion: share / practice examples of different charts that might be used in an organization. Assignment: Create a chart displaying insurance reimbursement by carrier.

Course - Business Intelligence Tools and Reporting

Module 8: Using Parameters in Reporting

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Create different types of parameters for a report.
2. Create a dynamic list of parameters and range values for a report.

Key Terms to Use:

Cascading Prompts	Default Parameters	Intelligent Defaults
Optional Parameters	Range Values	

Content Outline	Suggested Learning Activities
Objective 1: Create different types of parameters for a report.	Lecture / discussion / demonstration Discussion: share / practice examples of using parameters for reporting in an organization. Assignment: Create a daily appointment report.
Objective 2: Create a dynamic list of parameters and range values for a report.	Lecture / demonstration Assignment: Create an appointment report for a particular week.
All Objectives	Comprehensive Final Exam

Course - Business Intelligence Tools and Reporting

Module 1: History of Medical Clerical Work

Goal Statement: The learner will be able to discuss general office polices as pertaining to the organizational practices assistant in a healthcare setting.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Explain general office policies
2. Conduct basic information research

Key Terms to Use:

Assessments	Housekeeping Tasks	Reports
Confidentiality	Inventory	Security
Daily Routines	Management Responsibilities	Supplies
Delegation	Office Job Description Manual	Supplies
Duty Schedules	Office Policy	Time Management
Efficiency	Personal Appearance	
Ethical Behavior	Procedures Manual	

Content Outline	Suggested Learning Activities
Objective 1. Explain general office policies	Lecture/discussion

A. Instructor should give an overview is expected of an organizational practices assistant in a healthcare setting
  1. List general responsibilities
  2. List administrative skills
B. Explain general office policies and guidelines
  1. Importance of Office Policy and Procedures Manual and a Job Description Manual.
  2. Discuss various types of healthcare offices and how policies may differ depending on the type of practice
C. Clear procedures must be developed and implemented in order to manage a healthcare front office efficiently
  1. Must address necessary tasks and responsibilities
  2. Determine various employee duties
    a. What medical administrative assistant should accomplish before and the office opens
    b. What to do when meeting patients
    c. Procedure when taking messages on the phone and making call backs
	See Appendix 1.1
	
	Activity 1.1—Create a list of general office policies. Write a short explanation of each

3. Students should be able to:
    a. Discuss general healthcare office procedures
    b. Give examples of various procedures
    c. Debate how office procedures may be modified depending upon the type of healthcare practice	

Objective 2. Conduct basic information research
 	
A. Introduce students to internet research
   1. Explain differences between .com, .net, .org, and .edu websites.
   2. Students should know that there are a variety of search engines available – Google, Bing, Safari, FireFox
   3. Demonstrate how to perform searches on Medical Office Policies
B. Instruct students on how to create a MS Word document
   1. Compile a list of general office policies
   2. How to compose a short explanation of each general office policies
	Lecture/discussion
	
	Instructor Reference Material 1.2 - Learning Resources for Medical Assistants

Module 2:   Medical Ethics and Legal Responsibilities Found in a   Healthcare Setting

Goal Statement: The learner will gain an understanding and be able to debate what medical ethics is and what maintaining legal responsibilities entail in a healthcare setting. The learner will be able to explain HIPAA regulations and compliance and to give examples of safeguards against litigation.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Debate medical law and compliance
2. Follow HIPAA regulations
3. Employ safeguards against litigation

Key Terms to Use:

Advance directive	Etiquette	Malpractice
Arbitration	Express consent	Medical Patient abandonment
Authorization form	Health Insurance Portability and Accountability Act (HIPAA)	PHI – Protected Health Information
Bioethics	Hippocratic Oath	POLST – Physician Orders for Life Sustaining Treatment
Compliance plan	Implied consent	Privileged information
Consent form	Informed consent	Statute of limitations
Deposition	Liability	Subpoena
Durable power of attorney	Licensure	Summons
Emancipated minor	Litigation	
Ethics	Living will	

Recommended Books:

Bayes – Medical Office Procedures 8th Edition
McGrawHill Education – ISBN: 9780077862039
www.mhhe.com/bayes8e

Principals of Medical Ethics for the Medical Office Assistant.
Fordney/French/Follis – Administrative Medical Assistant
DELMAR/CENGAGE Learning – ISBN: 9781418064112

Content Outline	Suggested Learning Activities

Objective 1. Debate medical law and compliance.
 	
A. Define and discuss medical ethics, bioethics, and medical law
   1. Give examples of legal documents within the healthcare office practice
   2. Explain purpose of a medical compliance plan and how to protect against litigation
   3. Give examples of compliant methods the assistant can implement to protect against litigation
   4. Discuss the impact of negligence, malpractice, the statute of limitations, and the Patient Bill of Rights as pertains to the healthcare organizational practices assistant.
B. Student should be informed about local, state, and federal healthcare legislation and regulations pertaining to the healthcare assisting practice
   1. Offer a list of government agencies and watchdogs pertaining to healthcare law compliance
   1. Modern Hippocratic Oath
   2. POLST and new legislation
C. Differentiate between legal, ethical, and moral issues affecting healthcare
   1. Importance for an Office Compliance Officer
   2. Introduce compliance training materials
	Lecture/discussion
	
	See Appendix 2.1
	
	Activity 2.1—A physician in the office you work has refused to provide a patient with a copy of their medical records, stating that there is a fee. Is this ethical? Cite your sources for your answer.

Objective 2. Follow HIPAA regulations A. Instructor should explain in detail what the Health and Insurance Portability and Accountability Act (HIPAA) B. History of HIPPA C. Importance of HIPPA in the medical office	Lecture/discussion See Appendix 2.2 Activity 2.3—What is HIPAA? Create a short Internet research paper explaining HIPAA, the organization which oversees it, and ways in which HIPAA is enforced in the medical office. Cite your sources.
Objective 3. Employ safeguards against litigation A. Instructor should discuss safeguards against litigation B. Discuss medical law and legal documents in relation to patient care	Lecture/discussion See Appendix 2.3 Activity 2.3—Create a research paper giving three

	scenarios – one each for 1.PHI; 2.POLST; and 3.Implied contract. Each scenario should give an example of how to avoid a malpractice suit and litigation. Cite your sources.

Module 3:   Healthcare Terminology Used in Healthcare Industry

Goal Statement: The learner will be able to define and apply a wide variety of terminology used in a healthcare setting.

Module Objectives:

Upon completion of this module, the learner will be able to:
1.   Analyze Healthcare terminology used in the Healthcare Industry setting
2.   Practice using appropriate abbreviations and symbols while inputting data

Key Terms to Use:

Allowed charge	Associate practice	Capitation
Clinic	Coinsurance	Compliance
Deductible	EPO – Exclusive Provider Organization	FFS – Fee-For-Service
Urgent care center	Guarantor	Group practice
HMO – Health Maintenance Organization	Hospital	Indemnity plan IPA – Independent Practice Association
JACHO	Laboratory	Licensure
MCO – Managed Care Organization	Medical assistant	Multispecialty practice
Partnership	Patient encounter form	PCP – Primary Care Physician
POS plan – Point of Service plan	PPO – Preferred Provider physician practice	Organization Single
Specialized care center	Terminated account	Third party payer
Triage	Acute	Ambulatory

Recomended Books:

Bayes – Medical Office Procedures 8th Edition
McGrawHill Education – ISBN: 9780077862039
www.mhhe.com/bayes8e

Content Outline*	Suggested Learning Activities
Objective 1. Analyze healthcare terminology used in the healthcare industry setting. A. Instructor should discuss healthcare terminology used in a healthcare office setting. 1. General healthcare terminology used in communicating with patients and healthcare professionals in a healthcare	Lecture/discussion See Appendix 3.1 for useful information and internet links Instructor Reference

office setting should be explored before advancing to healthcare abbreviations used in healthcare documents. 2. Healthcare terminology is used to communicate information to patients, for patient history, in data, and in observations. Pronouncing healthcare terms correctly is necessary when conveying information to patients, coworkers, and healthcare professionals alike. B. Offer students glossary of healthcare office terms C. Demonstrate how to use Internet research to locate correct spelling and pronunciation of words.	Material 3.1 – Glossary of healthcare office terms Activity 3.1—Provide the definitions to the list of terms as they apply to a healthcare office setting. Cite your sources.

Objective 2. Practice using appropriate abbreviations and symbols while inputting data.
 	
A. Instructor should discuss the use of healthcare abbreviations in a healthcare office setting
  1. The utmost care must be taken when using healthcare terminology and abbreviations in healthcare documentation
  2. Only standard approved abbreviations should be used
  3. Discuss the Do Not Use Abbreviations compiled by The Joint Commission.
B. Introduce students to Internet research for Healthcare Terminology Abbreviations and Medical Billing and Coding
	Lecture/discussion
	
	Appendix 3.2 for useful information and internet links
	
	Activity 3.2—Create a table showing the Do Not Use medical abbreviations set by JACHO, what each abbreviation stand for, and what should be used instead.

Module 4: Dealing Successfully with Patients and Co-workers

Goal Statement: The learner will gain an understanding and be able to exercise effective verbal and nonverbal communication skills and use various conflict management styles as well as proper techniques to employ anger management and demonstrate appropriate office etiquette.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Demonstrate the elements of effective communication and identify the components of the circular communication cycle.
2. Practice nonverbal communication.
3. Identify the effective use of the five conflict management styles.
4. Illustrate proper techniques to employ anger management.
5. Demonstrate appropriate office etiquette.

Key Terms to Use:

Active listening skills	Bias	Circular Communication cycle
Colloquialisms	Communicate	Correct usage of "I" statements
Culture and ethnicity	Defensive communication	Demeanor
Differences in accountability	Differences in language	Discrimination
Displaced anger	Disruptive behavior	Empathy
Enunciate	Ethnic	Feedback
Gender	Generational differences	Nonverbal interpretation skills
Noncompliant	Nonverbal communication	Open mindedness
Open-ended questions	Perceptions	Personality differences
Positive attitude	Prejudice	Reflective listening
Stereotype	Unwillingness to compromise	Verbal communication
Willingness to compromise		

Content Outline*	Suggested Learning Activities

Objective 1. Demonstrate the elements of effective communication and identify the components of the circular communication cycle.
 	
A. Effective communication is an information-sharing process between two or more individuals where one person transfers a message in a manner that is easy for the receivers to understand. In business, effective communication helps individuals work more productively and efficiently. In a healthcare office setting, effective communication is imperative for patient care.
B. The 5 C's of communication
  1. Content – include all pertinent facts
  2. Concise – make your point(s)
  3. Clarity – use words that accurately convey your meaning
  4. Coherence – logically progress from one point to the next
  5. Check for accuracy – ask the person to repeat the information
C. Explain to students in detail the Circular Communication Cycle
	Lecture/discussion
	
	See Addendum 4.1
	
	Activity 4.1—Create a paper giving three scenarios of effective verbal communication in a healthcare office setting. Indicate how the Circular Communication Cycle was incorporated.

Objective 2. Practice nonverbal communication.	Lecture/discussion Activity 4.2—Have students create scenarios where nonverbal communication comes into play in a healthcare office setting. Assemble students into groups to practice nonverbal communication.

Objective 3. Identify the effective use of the five conflict management styles.
 	
A. Five conflict management styles
  1. Accommodating
  2. Avoiding
  3. Collaborating
  4. Compromise
  5. Confrontation
B. Compare and contrast which style works best for what situations.
	Lecture/discussion
	
	Activity 4.3—What are the five conflict management styles? Define and give examples of each.

Objective 4. Illustrate proper techniques to employ anger management.
 	
A. Present various techniques to employ anger management
    1. American Psychological Association
        a. Relaxation techniques
        b. Cognitive Restructuring
        c. Problem-Solving
        d. Better Communication
        e. Humor
        f. Environmental Change
    2. Mayo Clinic Staff
        a. Think before you speak
        b. Once you're calm, express your anger
        c. Get some exercise
        d. Take a timeout
        e. Identify possible solutions
        f. Stick with "I" statements
        g. Don't hold a grudge
        h. Use humor to release tension
        i. Practice relaxation skills
        j. Know when to seek help
B. Discuss importance of anger management and possible consequences if not used properly.
	Lecture/discussion
	
	Activity 4.4—Have students create scenarios where anger management techniques may need to come into play in a healthcare office setting. Assemble the students into groups to practice employing anger management techniques.

Objective 5. Demonstrate appropriate office etiquette. A. Present the students with a list of appropriate office etiquette skills. B. Discuss importance of appropriate office etiquette	Lecture/discussion Activity 4.5—Create a list of 10 appropriate office etiquette skills within a healthcare office setting. If using the Internet, cite your sources.

Module 5: Reception Techniques

Goal Statement: The learner will be able to utilize proper telephone etiquette and professional note taking skills and triage patients during phone conversations and efficiently schedule office visits and/or procedures.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Follow proper telephone etiquette and demonstrate professional note taking skills
2. Explain proper triage of patients during a phone conversation
3. Schedule office visits and/or procedures

Key Terms to Use:

Answering service	Callbacks	CC – Chief Complaint
Appointment block	Appointment book	Fixed interval
Cellular telephone	Cluster scheduling	Conference call
Double-booking appointments	Emergency care	EP – Established Patient
No-show	NP – New Patient	Open/fixed office hours
Pager	Protocol	Screening calls
Program	Referral	Software
Shared medical appointments	Speakerphone	Telecommunications
Telephone etiquette	Telephone log	Triage
Template	Urgent care	Voice mail
Wave scheduling		

Recommended Learning Program:

Medisoft Student At Home Version 17
8TH EDITION
By Medisoft
- Copyright: 2013
- Publication Date: June 27, 2012
- ISBN 10: 0077445252
- ISBN 13: 9780077445256

http://www.mheducation.com/highered/product.0077445252.html

Or

Student-At-Home Version of Medisoft V19
9TH EDITION
By Medisoft

- Copyright: 2016
- Publication Date: July 16, 2015
- ISBN 10: 0078124999
- ISBN 13: 9780078124990

http://www.mheducation.com/highered/product.0078124999.html

Content Outline	Suggested Learning Activities
Objective 1. Follow proper telephone etiquette and demonstrate professional note taking skills A. Discuss proper telephone etiquette techniques B. Students should be made familiar with various samples of: 1. Telephone Message Forms 2. Telephone Utilization Forms 3. Office Telephone Assessment Forms	Lecture/discussion See Appendix 5.1 for useful information and internet links For samples see Handouts: 5.1.1, 5.1.2, 5.1.3, 5.1.4, and 5.1.5 Activity 5.1—Have students create scenarios where telephone etiquette techniques may need to come into play in a medical office setting. Assemble the students into groups of two in order to practice employing telephone etiquette techniques.
Objective 2. Explain proper triage of patients during a phone conversation A. Discuss appropriate telephone triage practices 1. Acquiring and providing information 2. What information should be given 3. How much is too much B. Discuss healthcare setting communication policies	Lecture/discussion See Appendix 5.2 for useful information and internet links Activity 5.2—What is telephone triage? Give three case scenarios.
Objective 3. Schedule office visits and/or procedures. A. Discuss various types of scheduling programs available for medical administrative purposes today B. Introduce students to writing appointments and using appointment books C. Discuss additional scheduling methods used in a healthcare setting	Lecture/discussion See Appendix 5.3 Handouts 5.3.1 & 5.3.2 for scheduling samples Activity 5.3.1—The Office

1. Wave
   2. Modified Wave
   3. Double Booking
   4. Clustering
   5. Advanced Booking
D. Discuss pros and cons of various types of appointment management systems
  1. Healthcare administrative assistant must know how to pair patient needs with available facilities
  2. Scheduler must know how long various office visits and procedures take
	Manager has asked you to research and list three types of scheduling software for consideration. Which is your number one choice and why would you recommend it for the medical office you work in? Cite your sources.
	
	Activity 5.3.2—List three types of scheduling and give an explanation and an example of each.

Module 6: Written Communication in a Healthcare Setting

Goal Statement: The learner will gain an understanding of various forms of written communication, and utilize them in an effective manner.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Produce appropriate written and electronic communications
2. Produce appropriate electronic communications

Key Terms to Use:

Block style	Brochure	Complimentary closing
Editing	Email	Enclosure
Envelope	Fax cover sheet	Flyer
Formatting	Interoffice memo	Letterhead
Mail merge	Margins	Modified block style
Newsletter	Paragraphs	Research
Salutation	Tables	Tabs
Templates	Text	Word

Content Outline	Suggested Learning Activities
Objective 1. Produce appropriate written communications	Lecture/discussion

A. Written Communication
  1. Discuss various types of written communication   used inside and outside of a healthcare office setting
  2. Demonstrate the usage of a Word Processing Program such as Microsoft Word.
    a. Students should know reviewing techniques
    b. Students should know proofreading techniques
  3. Introduce students to MS Word Templates.
    a. Interoffice Memo
    b. Fax Cover Sheet
    c. Flyer
    d. Posted Notifications
  4. Introduce the parts of a letter
    a. Letterhead
    b. Date line
    c. Inside address
    d. Attention line
    e. Salutation
    f. Reference or subject line
	See Appendix 6.1
	
	See Handouts 6.1.1, 6.1.2, 6.1.3, 6.1.4 for MS Word Template samples
	
	Activity 6.1.1 – Create an Interoffice Memo
	
	Activity 6.1.2 – Create a Professional Fax Cover Sheet
	
	Activity 6.1.3 – Create a Flyer for an upcoming flu shot clinic
	
	Activity 6.1.4 – Complete the HIPAA Privacy notice sample. The notice will be

g. Body
     h. Complimentary closing
     i. Signature line
     j. Title
     k. Identification initials
     l. Enclosure or attachment notation
     m.Copy notation
     n. Postscript
  5. Discuss various letter styles:
     a. Block Style
     b. Modified block style
     c. Administrative Management Simplified Style Cover
        Letter
  6. Discuss punctuation styles
     a. open punctuation
     b. mixed punctuation
  7. Introduce and demonstrate use of MS Word Mail
     a. How to create a MS Word Mail Merge letter
     b. How to create recipient list using MS Word Mail Merge
        Wizard (which uses Access)
     c. How create a recipient list using MS Excel
     d. How to create an envelope to accompany a letter
B. Introduce students to the use of MS Word Templates for
   Newsletters and Brochures
C. Report Writing
  1. Discuss and demonstrate the proper format for
     professional report writing in APA Style
     a. Title page
     b. Text
     c. Numbering
     d. Headings
       1). Summary
       2). Introduction
       3). Chapter 1
     e. Quotations
     f. Notes
     g. Illustrations
     h. Bibliography
	posted in every patient waiting room. Cite your sources of information. See Handout 6.1.4
	
	See Handouts 6.1.5.a, 6.1.5.b, 6.1.5.c, 6.1.5.d for Letter Style samples
	
	Activity 6.1.5 – Create a Block Style Letter requesting the transfer of patient files from one practice to another.
	
	Activity 6.1.6 – Create a patient referral letter to a specialist using the Modified Block Style. Include references to enclosure of lab results.
	
	A: See Handout 6.1.7
	
	Activity 6.1.7 – Create a Mail Merge MS Word document, using the MS Office Mail Merge Wizard, informing a select number of area physicians of an upcoming breakfast meeting being hosted by a doctor in your practice and being held at a local hotel conference room. Create the Recipient list using MS Word Mail Merge Wizard for ten doctors. Choose six of the doctors in your recipient list to send the letter to.
	
	B: See Handout 6.1.8 & 6.1.9
	
	6.1.8 – Create a Newsletter to be distributed to office staff. Included pictures and articles pertaining to a healthcare administering setting.

	6.1.9 – Create a Tri-Fold Brochure informing patients of the latest flu vaccines. Include pictures, articles and information from various healthcare organization websites such as the Center for Disease Control: http://www.cdc.gov/flu/prote ct/vaccine/ **C:** See Handout 6.1.10

Objective 2. Produce appropriate electronic communications
 	
 A. Introduce students to the different forms of communication using electronic technologies and when each might be used
     a. VoIP
     b. Blogs
     c. Wikis
     d. Podcasts
     e. Voice Conferencing
     f. Web Conferencing
     g. Video Conferencing
 B. Email
   1. Discuss the parts of an email
     a. What is the proper protocol for a subject line
     b. When to use cc
     c. When to use bcc
     d. Etc.
   2. Introduce students to the proper way to compose email messages for different audiences
	Lecture/Discussion
	
	 See Handout 6.2.1
	
	 See Appendix 6.2
	
	 Activity 6.2 – Create an email to be sent to all staff members informing them of an emergency all-staff meeting on Thursday afternoon at 3pm.

Module 8: Utilize Technology in Healthcare Setting

Goal Statement: Explore various technologies and software used in medical billing and scheduling.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Discuss various technologies used in medical billing.
   2. Practice using computerized billing systems using spreadsheets or an electronic program – RECOMMENDED: MEDISOFT STUDENT VERSION
   3. Practice scheduling with spreadsheets or an electronic program – RECOMMENDED: MEDISOFT STUDENT VERSION.

Key Terms to Use:

Audiotape	Calendar	Computer
Computer disk	Database program	EHR
Electronic filing system	Email program	Encrypted files
E-signature	External storage	File service
File transfer	Head phones	Internet
Laptop	Medical billing system	PDA
Printer	Scanner	Software
Spreadsheet program	Telecommunications	Teleconference
Transcription	Videotape	Voice recognition software
Word processing program		

Recommended Program:

Medisoft Student At Home Version 17
8TH EDITION By Medisoft
- Copyright: 2013
- Publication Date: June 27, 2012
- ISBN 10: 0077445252
- ISBN 13: 9780077445256

http://www.mheducation.com/highered/product.0077445252.html
Or
Student-At-Home Version of Medisoft V19
9TH EDITION By Medisoft
- Copyright: 2016
- Publication Date: July 16, 2015
- ISBN 10: 0078124999
- ISBN 13: 9780078124990

http://www.mheducation.com/highered/product.0078124999.html

Content Outline*	Suggested Learning Activities
Objective 1. Discuss various technologies used in medical billing. A. Changes and technological advancements in billing within the healthcare community B. Medical billing mistakes and what can be done to avoid them	Lecture/discussion See Appendix 8.1 See Instructor Reference Material 8.1 See Handout 8.1 Activity 8.1 –Create a research paper listing the five top medical billing software programs on the market today. What do they do? Which one would you pick for your medical office? Why? Cite your sources.
Objective 2. Practice using computerized billing systems using spreadsheets or an electronic program	Lecture/discussion Activity 8.2 –Complete MediSoft assignment, or Create a Patient Billing Statement using Excel. See Handout 8.2 for sample
Objective 3. Practice scheduling with spreadsheets or an electronic program	Lecture/discussion Activity 8.3 –Complete MediSoft assignment, or Create appointments using Excel. See Handout 8.3.1 and 8.3.2 for samples

Module 9:   Health Insurance Procedures Used in Healthcare

Goal Statement: Discuss and compare various types of medical insurance plans; comprehend and employ the proper use of diagnostic and procedural codes for insurance billing; clarify coding compliance errors.

Objectives:

Upon completion of this module, the learner will be able to:
1. Differentiate between the various types of medical insurance plans for billing purposes.
2. Practice properly coding diagnoses using ICD-10 – CM conventions, abbreviations, and guidelines – RECOMMENDED: MEDISOFT STUDENT VERSION
3. Explain the result of coding compliance errors.

Key Terms to Use:

ACA – Affordable Care Act and Patient Protection	Adjudication	AP - Accounts payable
AR – Accounts receivable	Benefits	Capitation
Cash flow	CDHP – Consumer-driven health plan	Certification
Coinsurance	Compliance	Copay
Covered California	Covered services	Deductible
Diagnosis code	EHR – Electronic Health Record	EPO – Exclusive Provider Organization
Ethics	Excluded services	FFS – Fee for service
Health plan	Healthcare claim	HIT – Health Information Technology
HMO – Health Maintenance Organization	Indemnity plan	Managed care
MCO – Managed Care Organization	Medicaid	Medical
Medical billing cycle	Medical coder	Medical insurance
Medical insurance specialist	Medical necessity	Medicare
Network	Non-covered services	Out of network
Out of pocket	Participation	Patient ledger
Payer	PCP - Primary Care Physician	Policyholder
PMP – practice management program	PMPM – Per member per month	Preexisting condition
PPO – Preferred Provider Organization	Preauthorization	
Premium	Preventative medical services	Procedure code

Provider	RCM – Revenue Cycle Management	Referral
Schedule of benefits	Self-insured health plan	Third-party payer

Content Outline*	Suggested Learning Activities

Objective 1. Differentiate between the various types of medical insurance plans for billing purposes.
 	
A. Discuss and define the different types of medical plans:
  1. EPO
  2. HMO
  3. POS
  4. PPO
B. Define the "metal" categories:
  1. Bronze
  2. Silver
  3. Gold
  4. Platinum
C. What is Covered California
D. MEDICAID – MEDICARE – MEDI-CAL
  1. MEDICAID is a joint federal and state program that helps with medical costs for some people with limited income and resources. Medicaid also offers benefits not normally covered by Medicare, like nursing home care and personal care services.
    You can get help from your state paying your Medicare premiums. In some cases, Medicare Savings Programs may also pay Medicare Part A (Hospital Insurance) and Medicare Part B (Medical Insurance) deductibles, coinsurance, and copayments if you meet certain conditions
  2. MEDICARE eligible at age of 65 if:
    i. You are a U.S. citizen or legal resident, and
    ii. You have resided in the United States for a minimum of five years
    iii. Worked at least 10 years in Medicare-covered employment
    a. If the above applies and they have had Social Security deductions taken from their payroll, chances are they will automatically receive a Medicare card in the mail just prior to becoming eligible, showing benefits for both Part A (hospital care) and Part B (medical care). Part B is optional, can be declined, and requires most people to pay a monthly premium for participation.
	Lecture/discussion
	
	See Appendix 9.1
	
	Activity 9.1a –List four types of insurance policies and explain the coverage details of each.
	
	Activity 9.1b –What are the steps to the Medical Billing Cycle?

They may have to apply for Medicare benefits if:
  i. They have not applied for Social Security or Railroad
    Retirement benefits, or
  ii. They were employed by the government, or
  iii. They have kidney disease.
  b. <u>U.S. citizens who are 65 and older</u> but do not have
    enough Medicare-covered employment, as well as
    permanent resident aliens aged 65 and older who have
    lived in the United States for five years prior to
    applying for Medicare, are eligible for Medicare
    benefits. This is known as "voluntary enrollment."
    These individuals must pay monthly premiums for
    both Medicare Part A and Part B benefits.
  c. <u>Under 65</u> – Generally, if they are under age 65, they
    will qualify for Medicare if:
    i. They have End Stage Renal Disease (ESRD), or
    ii. They have received Social Security Disability
      Income (SSDI) payments for 24 months (or in the
      first month of disability for ALS ("Lou Gehrig's
      Disease"
  3. MEDI-CAL is California's Medicaid program. This is a
    public health insurance program that provides free or low
    cost medical services for children and adults with limited
    income and resources.
E. Introduce the steps to the Medical Billing Cycle
    Step 1 – Preregister patients
    Step 2 – Establish financial responsibility
    Step 3 – Check in patients
    Step 4 – Review coding compliance
    Step 5 – Review billing compliance
    Step 6 – Check out patients
    Step 7 – Prepare and transmit claims
    Step 8 – Monitor payer adjudication
    Step 9 – Generate patient statements
    Step 10 – Follow up payments and collections	

Objective 2. Practice properly coding diagnoses using ICD-10 – CM conventions, abbreviations, and guidelines
 	
A. What is the Center for Disease Control?
B. Discuss ICD 10-CM and ICD 10-PCS coding and compliance
    laws.
C. Discuss healthcare compliance as well as resources and
    agencies
D. Why did we make the switch from ICD 9 to ICD 10?
    1. <u>ICD10Data.com</u> is a free reference website designed to
      help you easily lookup the new American ICD-10-CM
	Lecture/discussion
	
	See Appendix 9.2
	
	Activity 9.2 –Complete MediSoft Assignment or, Instructor will give students a list of medical diagnoses and procedures and have them look up the correct ICD-10 codes.

(diagnosis) and ICD-10-PCS (procedure) medical billing codes. 　2. ICD-10-CM/PCS replaced ICD-9-CM on Thursday October 1, 2015, therefore all claims with a date of service on or after October 1 require the use of ICD-10-CM/PCS codes. E. ICD 10 – Codes and easy ways to lookup:	Instructor will give students a list of codes to use.
Objective 3. Explain the result of coding compliance errors. A. Discuss possible compliance errors and how they affects making these errors have B. Discuss strategies for success in coding compliance	Lecture/discussion See Appendix 9.3 Activity 9.3 –What are some of the ramifications of making coding compliance errors? Give a specific example. Cite your sources.

Module 10:   Daily Financial Responsibilities

Goal Statement: Demonstrate billing and collection procedures and banking procedures using a variety of computer programs and medical software.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Perform billing and collection procedures
2. Perform banking procedures

Key Terms to Use:

A/P - Accounts payable	A/R – Account receivable	Aging accounts Bankruptcy
Bill	Bookkeeping	Calculator
Cash basis	Charge	Clean claim
Clearinghouse	CMS-1500 claim form	Collection agency
Collection at time of service	Credit	Cycle billing
Daily journal	Debit card	Deductions
Dependent	Deposits	Direct earnings
Discounts	Dun message	Electronic claims
EOB	ERA	Fee adjustment
Fee schedule	Fee-for-service	FICA
Garnishment	Guarantor	Identity theft
Income statement	Indirect earnings	Interest
Ledger card	Monthly billing	Monthly statement
Multipurpose billing form	Open accounts	Patient information form
Patient statement	Posting Audit	Practice analysis report
Procedure day sheet	Quantum merit Receipt	Red flag requirements
Scrubber program	Terminated account	Third-party liability
Write-off		

Content Outline*	Suggested Learning Activities
Objective 1. Perform billing and collection procedures	Lecture/discussion
A. Explain professional fees, fee policies, fee schedules, and fee discounts	Appendix 10.1
B. Demonstrate how to calculate charges for medical services	
1. RECOMMENDED: Medisoft Program	For samples, see handouts:
2. Recommend fee schedule look-up resources and how to use them	10.1.1, 10.1.2, 10.1.3, 10.1.4, 10.1.5, 10.1.6,
a. Medicare Physician Fee Schedule	10.1.6a, 10.1.6b
b. CMS.Gov Fee Schedule	
C. Demonstrate how to process patient statements based on the	Activity 10.1 –Using the

patient encounter form and the physician's fee schedule (RECOMMENDED: Medisoft Program)
D. Discuss the different types of billing options used by medical practices for billing patients
E. Multipurpose billing form
  1. Physician's identifying data
  2. Patient and Insurance data
  3. Assignment of benefits and authorization to release information
  4. Codes for professional services
    a. Procedure codes for professional services are taken from the CPT (Current Procedural Terminology) codebook
    b. Diagnostic codes are taken from the ICD-10-CM (International Classification of Diseases, 10th revision, Clinical Modification) codebook
  5. Diagnostic codes
  6. Additional diagnostic codes
  7. Appointment information
  8. Total charges and payments
F. Demonstrate how to create and post to a patient's ledger card
  1. Physician's identifying data
  2. Patient and Insurance data
  3. Itemized fees for professional services with line-by-line description
  4. Insurance claim submitted showing dates of service billed
  5. Payment received on account from insurance, listing voucher number, and how much insurance paid (ex. 80%; 10%)
  6. Billed patient copay amount (ex. 20%; 90%)
  7. Patient's payment check received, listing check number
G. Computer-generated monthly itemized billing statement (RECOMMENDED: Medisoft Program)
  1. Physician's identifying data
  2. Patient and insurance data
  3. Reference/account number for identifying purposes
  4. Itemized charges shown line by line
  5. Possible DUN message for delinquent account
  6. Aging analysis
  7. Balance due
  8. Ending date for billing cycle
H. Billing services
  1. Out of office service
  2. Create professional computerized monthly statements
  3. Receive account information using secure Internet file transfer to create statements and complete insurance claims
	patient encounter form, the physician's fee schedule, and proper diagnosis and procedure codes, record the information on a multipurpose billing form. Instructor should supply the necessary forms for the student to complete this assignment.

I. Instructor should discuss the procedures and options used for collecting delinquent accounts.	

Objective 2. Perform banking procedures
 	
A. Writing checks
  1. Written in ink and signed.
  2. Include the amount to be paid.
  3. Make payable to the payee
  4. Made payable on demand
  5. The name of the bank that is to make the payment should be included on the check.
  6. Cashier Check
  7. Check issued on bank paper and signed by bank representative.
  8. Certified check
  9. Payer's check written and signed by a payer and stamped "certified" by the bank
  10. Money order
  11. Certificate of guaranteed payment
B. Accepting Checks
  1. Should have the correct date.
  2. The correct amount should be written in dollar numeric and alpha amounts.
  3. The check should contain the signature of the payor.
  4. Do not accept third-party check.
  5. One made out to the patient rather than the practice.
  6. Do not accept a check marked "Payment in Full" unless it actually does pay the complete outstanding balance.
C. Endorsing Checks
  1. Write the name of the doctor or practice on the bacl of the check.
  2. Include "For Deposit Only" on the back of the check.
  3. Add the bank account numbers on the back of the check.
  4. Use ink or rubber stamp
  5. Place endorsement in the 1.5 inch area on the back of the check.
D. Completing deposit slips
  1. Post payments to the patient ledger card.
  2. Keep checks to be deposited together.
  3. Fill out the deposit slip.
  4. Account number should be printed on all deposit slips in MICR numbers which match those on check.
  5. Include a computer printed list of checks along with the deposit slip.
E. Making deposits
  1. Make deposits in person.
	A. Lecture/discussion
	
	Appendix 10.1
	
	Suggested Activities:
	COMPLETE MEDISOFT ASSIGNMENTS or…
	
	Activity 10.2a – List the items you should add to the back of a check that is received from a patient.
	
	Activity 10.2b – Complete a Deposit slip; include a computerized list of all checks assigned for deposit.
	
	Activity 10.2c – Complete a Patient Receipt for partial payment received for services provided.

2. Do not send cash through the mail.
3. Get a deposit receipt.
F. Reconciling bank statements
   1. Compare the office financial records to the bank's records to confirm they are consistent.
   2. Must be completed on a monthly basis.
   3. All checks written and all checks deposited must match on both records.
G. Electronic banking
   1. Use an appropriate computer password for security
   2. Tasks are the same used in traditional banking methods.
   3. Computer software program will:
      a. Calculate the new balance
      b. Reconcile the office bank statement	

Recommended Program to accompany this course – Medisoft Student At Home Version:

Medisoft Student At Home Version 17
8TH EDITION
By Medisoft
- Copyright: 2013
- Publication Date: June 27, 2012
- ISBN 10: 0077445252
- ISBN 13: 9780077445256

http://www.mheducation.com/highered/product.0077445252.html

Or

Student-At-Home Version of Medisoft V19
9TH EDITION
By Medisoft
- Copyright: 2016
- Publication Date: July 16, 2015
- ISBN 10: 0078124999
- ISBN 13: 9780078124990

http://www.mheducation.com/highered/product.0078124999.html

Module 11:   Office Maintenance and Management

Goal Statement: Define the role of a Healthcare Organization Manager and the use of
software programs to aid in managing assigned tasks; discuss the creating
of an ergonomically correct workplace environment; and demonstrate the
preparing of educational materials for distribution to patients and staff.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Define the role of the Healthcare Organization Manager
2. Design an ergonomically correct workplace environment
3. Prepare and distribute educational materials

Key Terms to Use:

Agenda	Applicant screening	Building maintenance
Business travel	B/O –Back ordered	Employee file
Employee handbook	DOL –Department of Labor	Housekeeping
Inventory cards	Equipment maintenance	Invoices
Itinerary	Inventory control systems	Leasing
Medical waste management	Job descriptions	Office productivity
Office supplies	Office policies and procedures manual	Orientation and training
OSHA Compliance	OM –Office –Manager	Practice
Purchasing	Performance review	Sexual harassment
Sharps containers	Recruitment and hiring	Staff meeting
Termination of employees	Staff development	Visa
Ergonomics	Workplace Environment	

Content Outline*	Suggested Learning Activities
Objective 1. Define the role of the Healthcare Organization Manager A. A Healthcare Organization Manager is responsible for the operations and administration of a healthcare office. They must ensure that the office is running efficiently by supervising office staff. They are responsible for hiring, terminating, and training employees. They oversee the billing portion of the office. 1. Primary responsibilities may inclue:	Lecture/discussion Appendix 11.1 Activity 11.1.a – Create a generalized list of daily activities a Healthcare Organization Manager should perform.

a. Arrange cleaning staff.
b. Arrange for emergency maintenance visits for building.
c. Assess employee performance.
d. Delegate responsibilities.
e. Develop and implement office policies and procedures.
f. Formulate objectives and processes
g. Generate inventory records.
h. Hire, terminate, and train staff.
i. Maintain medical records.
j. Make deposits.
k. Marketing.
l. Order medical and office supplies.
m. Oversee billing, coding, and collections.
n. Pay medical office bills.
o. Perform data entry and processing.
p. Prepare the office budget.
q. Process company responses to claims.
r. Provide educational material for patients.
s. Public relations.
t. Reconcile account information.
u. Schedule appointments.
v. Submit billing statements to patients.
w. Submit claims to insurance
x. Supervise secretaries, receptionists, and medical billers and coders.
 	
2. Healthcare Office Manager Requirements: According to the U.S. Bureau of Labor Statistics (BLS), office management positions frequently require postsecondary training, such as an associate's degree (*www.bls.gov*). However, those starting out with higher levels of training, such as a bachelor's degree, are on the higher end of the pay scale. The Professional Association of Health Care Office Management (PAHCOM) offers a certification program for healthcare office managers that can be taken once the applicant has experience in the healthcare field and has completed college coursework.
B. Using Microsoft Office Programs to help manage assigned tasks in an office.
   1. Microsoft Project is a project management software program, developed and sold by Microsoft, which is designed to assist a project manager in developing a plan, assigning resources to tasks, tracking progress, managing the budget, and analyzing workloads.
   2. Discuss why a Healthcare Office Manager might choose
	Activity 11.1.b – Create a one page staff meeting agenda using a Word Processing program. Include a title; the date; time; location; food/drink items available; Call to order; Minutes of the previous meeting; Committee Reports; Unfinished Business; New Business; date of the next meeting. Attach a sign-in sheet
	
	Activity 11.1.c – Give a specific example of how a Healthcare Office Manager would use Microsoft programs to manage assigned daily office tasks. Include a list of programs you would use in your example.

to use a project management software program to keep track of assigned tasks. C. Explore Microsoft OneNote D. Discuss how to integrate Word, Excel and Outlook to help manage assigned office tasks.	

Objective 2. Design an ergonomically correct workplace environment
 	
A. Discuss the meaning of an ergonomically correct workplace environment
B. Explain how to maintain a healthy posture when sitting and typing while in a workplace environment
  1. Adjust chair height
  2. Use the footrest if you must adjust your chair height so that your feet do not touch the ground
  3. Adjust seat tilt
  4. Adjust arm rest height
  5. Adjust chair back
  6. Adjust desk height – if possible
  7. While keying, keep wrists in a neutral position - hands should float over the keyboard
  8. Change your posture every thirty minutes or
  9. Stand and walk every thirty minutes
  10. Monitor should be positioned approximately 20 to 40 inches from your face
  11. Monitor should be centered directly in front of you
  12. Adjust monitor to be approximately 15 to 20 degrees below eyelevel, tilting the screen if necessary
  13. Adjust monitor brightness and contrast to your personal specifications so that you can see clearly without straining
  14. Elbows should be at a 90 degree angle when keying
  15. Keyboard should be within easy reach
  16. Use a keyboard tray, if possible, to keep your keyboard at the correct height or use a wrist pad if a keyboard tray is not an option
  17. Choose the right size mouse for your hand
  18. Use a headset
C. Discuss the reasons for creating ergonomically correct healthcare environments, both for employees and for visitors.
	Lecture/discussion
	
	Appendix 11.2
	
	Activity 11.2.a – List five attributes of maintaining a healthy posture and tell why they are important. Cite your sources.
	
	Activity 11.2.b – Create a research paper which discusses what design features should be considered when creating an inviting and comfortable waiting room in a healthcare setting. Cite your sources.

Objective 3. Prepare and distribute educational materials A. Discuss the collection of research data B. What type of data works best for which situations	Lecture/discussion Appendix 11.3 Activity 11.3 – Create a list of educational materials you may find in a

	Dermatologists waiting room. Where did the information come from? How often should information be updated and redistributed?

Module 12:   Finding the Right Job

Goal Statement: Demonstrate how to create a resume and implement a successful job search strategy using work source resources.

Module Objectives:

>   Upon completion of this module, the learner will be able to:
>   1.   Create a resume
>   2.   Implement a successful job search strategy

Key Terms to Use:

Career Opportunities	Cover Letter	Types of Resume
Experience	Follow-up Letter	Visible Job Market
Personal References	Interview Techniques	Action Verbs as Power Words
Hidden Job Markets	Keywords	Achievements
Skills Evaluation	On-Line Job Application	Professional References
Resume Personalization	Research Potential Employers	Attire
Employment Agencies	Walk-in Job Search	Honesty
Volunteerism	List of Questions	Rejection
Contact Card/Business Card		

Content Outline*	Suggested Learning Activities

Objective 1. Create a Resume
 	
A. Resumes:
   1. What is a resume?
   2. What makes a good resume?
   3. What is a chronological resume vs. a functional resume?
   4. Which is the best type to use, when and why?
B. Resume Templates
   1. Can you use a Word Processing program template?
   2. How do you modify a Word Processing program template to "make it your own"?
	Lecture/discussion
	
	See Appendix 12.1
	
	Activity 12.1 –Create your resume using a Word template. Visit the Career Center on your campus or a Government Work Source Center for help.

Objective 2. Implement a successful job search strategy A. Job Search Resources 1. What career resources are available in the community or on campus? What is a Work Resource Center? What is a	Lecture/discussion Activity 12.2.a – Assemble students in groups of three.

Career Counseling Center? What do these centers have to offer?
    2. Should you use an employment agency? A temp agency?
B. Application Process
    1. How should you answer questions in an on-line job application form that don't exactly "fit" your profile?
    2. What research should be done before submitting a resume or going on an interview?
C. The Interview Process:
    1. What are interviewing techniques?
    2. How should you prepare for an interview?
    3. What should you wear to an interview?
    4. How can you turn rejection into a learning opportunity?
    5. How can you keep from being discouraged?
	Have students practice interviewing to each other. One student is the Office Manager; one is the Assistant Manager. Students should prepare a list of questions for the managers to ask. Students should prepare a list of their own questions to ask. Vary the types of Healthcare Organizations interviewing.
	
	Activity 12.2.b – Determine a list of entry level front end Healthcare Organization office positions available in your area.

Module 1: Introduction to Health Care Information and Health Care Data Quality

Goal Statement: The learner will be introduced to health care information and quality of
health information.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Explain the various definitions of health care information.
2. Differentiate between the types of health care information and its uses.
3. Explain the flow of health information in a health care organization.
4. Identify and explain elements of quality of health care data.
5. Describe various data sets

Key Terms to Use:

Accessibility	Administrative Data	Aggregate Data
Clinical Data	Coding Systems	Comparative Data Uses
Consistency	Data	Data Sets
EHR	EMR	External Data
HIPAA	Information	Internal Data
NAHIT	Patient Specific	PHR
Problem- Oriented Record	Source-Oriented Record	

Content Outline*	Suggested Learning Activities

Objective 1.   Explain the various definitions of health care information.
A. Definitions of health care information terms.
    1. EMR
    2. EHR
    3. PHR
    4. PHI
B. HIPAA definition of protected health information (PHI)
C. External data:
    1. Reporting
    2. Benchmarking
    3. Comparative Data Uses
	• Lecture PPT: Introduction to Health Care Information
	• Lecture PPT: Health Care Data Quality

Objective 2. Differentiate between the types of health care information and its uses.
A. Clinical data - examples: Lab, radiology, progress notes, consultation reports, discharge summary
B. Administrative data- examples: patient registration information consent, financial and billing information
C. External data for reporting and monitoring
   1. Patients specific vs. Aggregate data vs. Comparative data
   2. Problem- Oriented Record vs. source - Oriented Record
	• Register in Lab and Verify Access
	
	• Appendix 1: Handout; Instructions for VLab Registration

Objective 3. Explain the flow of health information in a health care organization. A. Information generated at registration goes to various providers and departments including clinical and administrative B. Coding: CPT, ICD etc.	**DB1 : Data Sharing-- Accuracy and Integrity** ● Discuss the importance of accuracy in integrity of data in healthcare. ● Name the elements of data accuracy and integrity. ● Provide specific examples on the issues related to accurate data accuracy and integrity related to sharing of data.
Objective 4. Identify elements of quality of health care data. A. Accessibility B. Consistency C. Currency D. Granularity E. Precision F. Accuracy G. Comprehensiveness H. Definition I. Relevancy J. Timeliness	**DB2: mHealth** • What is mHealth? • Provide 2-3 examples on how it has impacted healthcare already. • How do you think the role of mHealth will be expanding? • Are there any negatives?
Objective 5. Describe various data sets A. UHDDS B. UACDS C. MDS	Module 1 quiz

Module 2: Legal Aspects of Health Care Information; History of Health Care Information

Goal Statement: The learner will be introduced to legal aspects of health information and the evolution of health care information.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Apply legal concepts and principles to management of health information such as retention and destruction policies for health information (including confidentiality and security measures).
2. Utilize software to complete basic health information management processes
3. Identify the role of accrediting and regulatory bodies.
4. Explain history of evolution of computer systems and impact of initiatives on use of technologies

Key Terms to Use:

AAAHC	CARF	Computer Systems
Confidentiality Measures	Consent	Data Storage
Destruction Policies	IS process	Joint Commission
NCQA	Release	Retention
Retention Policies	Retrieval Systems	Security Measures
Storage	Use Of Records	Voice Recognition Rebounds

Content Outline*	Suggested Learning Activities
Objective 1. Apply legal concepts and principles to management of health information such as retention and destruction policies for health information (including confidentiality and security measures). A. Consent, storage, retention, release and use of records. B. Data storage and retrieval systems	• Lecture PPT: Legal Aspects of Health Care Information • Lecture PPT: History of Health Care Information

Objective 2. Utilize software to complete basic health information management processes
  A. Data Retrieval
  B. Scheduling and Appointment
  C. Checking in a Patient
  D. Coding an Office Visit
  E. Creating an Office Note
  F. Creating a Problem List
  G. Clinical and Health Reporting
  H. Creating a Consultation
  I. Ordering an Outpatient Lab
  J. Alerts and Triggers
  K. Ordering a medication
  L. Creating a Discharge Summary
  M. Checking out a Patient
  N. Restricted Records
	VLab Activities:
	• Data Retrieval
	• Scheduling an Appointment
	• Checking In a Patient
	• Creating an Office Note
	• Creating a Problem List
	• Creating a Consultation
	• Ordering an Outpatient Lab
	
	• Appendix 2a: Handout; VLab Vista Instructions
	
	• Project 1--Data storage and retrieval
	
	• Appendix 2b: Handout; Project 1 Instructions
	
	• Module 2 quiz

Objective 3. Identify the role of accrediting and regulatory bodies.
  A. Facility Licensure
  B. Certification
  C. Joint Commission Accreditation
  D. Other Accrediting Organizations
  E. Joint Commission—hospitals and other health care facilities
  F. NCQA—managed care plans
  G. CARF—Rehabilitation facilities
  H. AAAHC—Ambulatory care facilities
	Discussion Board
	DB3: Relationship between federal initiatives and adoption of HCIT: EHR Certification
	• Explain the concept of EHR certification.
	• What is the role of the CCHIT in this process?
	• Provide actual examples of certified EHRs.

Objective 4. Explain history of evolution of computer systems and impact of initiatives on use of technologies
 	
A) Defining the IS process such as
   1) Data
   2) Processes
   3) People
   4) Technology
B) History and evolution of computer systems such as main frames, microcomputers, etc.
C) Impact of changing health care environment (Medicare, Medicaid, IOM) on access and use of various technologies such as
D) Internet use moves to new level
E) Voice recognition rebounds
   1) Bar coding and RFID
   2) PDAs and multipurpose cell phones
   3) PHRs and consumers maintaining Web-based records
   4) Web 2.0 technologies
	DB4: Communication and Network Technologies (EHRs, PHRs, HIEs, portals, telehealth, public health)
	• List technologies that support healthcare information systems.
	• Discuss the use of any 3 technologies in the management of healthcare information, or the development of healthcare information systems (HCIS).
	• How are Web 2.0 technologies used to establish connections between patients or other consumers?

Module 3:   Clinical Information Systems and Federal Legislation to Promote Use of Technology for Improving Quality of Care

Goal Statement: The learner will be introduced to the recent Federal Efforts to promote adoption and meaningful use of technology and enhance quality of patient care through the use of Health IT

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Describe major clinical information systems used in health care.
2. Explain how clinical information systems affect quality, safety, efficiency, and outcomes of the patient.
3. Discuss major barriers to adoption of technologies in health care and strategies to overcome them
4. Explain the HITECH Act and Medicare and Medicaid EHR incentive programs.
5. Describe HIEs and the efforts to promote exchange of health information across health care organizations.
6. To discuss payment reforms including the Affordable Care Act (ACA)

Key Terms to Use:

CPOE	EHR Incentive Programs	Electronic Health Record
Financial Outcomes	HIE	HITECH Act
Improved quality	Medication Administration	New Forms of Payment
Personal Health Record	Privacy Barriers	Safety Outcomes
Security Barriers	Technical Barriers	Telehealth
Telemedicine		

Content Outline*	Suggested Learning Activities
Objective 1 Describe major clinical information systems used in health care. A) Electronic Health Record B) Computerized Provider Order Entry (CPOE) C) Medication Administration D) Telemedicine/Telehealth E) Personal Health Record	• Lecture PPT: Clinical Information Systems • Lecture PPT: Federal Legislation to Promote Use of Technology for Improving Quality of Care

Objective 2 Explain how clinical information systems affect quality, safety, efficiency, and outcomes of the patient. A) Improved quality, outcomes and safety B) Computerized reminders and alerts C) Improved compliance with practice guidelines D) Reduction in medical errors E) Improved efficiency, productivity, and cost reduction F) Improved service and satisfaction	VLab Activities: • EDCO Solcom Scavenger Hunt • Appendix 3a: Handout; EDCO Solcom Instructions
Objective 3 Discuss major barriers to adoption of technologies in health care and strategies to overcome them A) Barriers to adoption B) Strategies for overcoming them C) Financial D) Organizational or Behavioral E) Technical Barriers F) Privacy and Security Barriers	**DB5: Consumer Informatics** • What is consumer informatics? • Provide examples of consumer informatics in healthcare? • Include consumer-mediated information. • Choose 2 examples and explain. • Include benefits and challenges.

Objective 4   Explain the HITECH Act and Medicare and Medicaid EHR incentive programs.
A) HITECH Act
  1) Components of Act
B) Medicare and Medicaid EHR Incentive Programs
C) Meaningful Use:
  1) Definition and criteria
D) Medicare and Medicaid EHR Incentive Programs
E) 62 Regional Extension Centers
F) Created health IT workforce educational opportunities
G) Beacon communities and Strategic Health IT Research Projects (SHARPs)
H) HIE infrastructure—Nationwide Health Information Network (NwHIN)
I) EHR certification
J) Expanded Privacy and Security Regulations
	DB6: IG Strategies
	
	• What is information governance (IG)?
	• Where does healthcare stand with regards to IG?
	• What challenges exist?
	• What more needs to be done?

Objective 5. Describe HIEs and the efforts to promote exchange of health information across health care organizations. A. Health Information Exchange (HIE) B. set of standards, services, and policies that enable the secure exchange of health information over the Internet C. intent is to securely link regional and state HIEs D. Direct Project E. CONNECT Open Source Solution	• Project 2--Evaluation of EHRS for meaningful use (compare 2 EHRS) • Appendix 3b: Handout; Project 2 Instructions
Objective 6. To discuss payment reforms including the Affordable Care Act (ACA) A. New Forms of Payment B. Bundled payments C. Pay for performance D. Shared savings programs E. Capitation or global payment F. Episode of care G. Other variations	Module 3 quiz

Module 4:   System Acquisition & System Implementation

Goal Statement: The learner will be introduced to the system acquisition and system implementation process.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Explain the major stages of SDLC process
2. Describe the challenges occurring during the system acquisition process.
3. Discuss the process for acquiring the HCIS
4. Describe System acceptance and change management.
5. Describe the challenges occurring during the system implementation process.
6. Discuss the process for implementing the HCIS

Key Terms to Use:

HCIS	Implementation Team	IT infrastructure
RFP	SDLC	System Acquisition Process
System Champion	System Implementation Process	Technical Support Staff

Content Outline*	Suggested Learning Activities
Objective 1 Explain the major stages of SDLC process A) Phases B) Planning and Analysis C) Design D) Implementation E) Support and Evaluation	• Lecture PPT: System Acquisition • Lecture PPT: System Implementation
Objective 2 Describe the challenges occurring during the system acquisition process. A) Instructions for vendors B) Organization objectives C) Background of the organization D) System goals and requirements E) Vendor qualifications F) Proposed solutions	• VLab Activities: Quadramed (Merging duplication in MPI) • Appendix 4a Handout, Quadramed Instructions part 1 • Appendix 4b Handout, Quadramed Instructions part 2

Objective 3 Discuss the process for acquiring the HCIS A) Criteria for evaluating proposals B) General contractual requirements C) Pricing and support D) The System Acquisition Process E) Conduct a cost-benefit analysis F) Identify acquisition and support costs G) Identify and evaluate potential benefits of each option H) Prepare a summary report and recommendations I) Recommend having at least 2-3 vendors in final ranking J) Conduct contract negotiations	Module 4 Quiz
Objective 4 Describe System acceptance and change management A) Define expectations B) Know your culture and do not underestimate use resistance C) Allocate sufficient resources, including technical support staff and IT infrastructure D) Provide adequate initial and ongoing training E) Manage unintended consequences	Midterm Exam: Covers Modules 1-4

Objective 5   Describe the challenges occurring during the system implementation process.
 A) Failure to manage vendor access to organization leadership
 B) Failure to keep the process objectives (getting caught up in the vendor razzle-dazzle)
 C) Overdoing or under-doing the RFP
 D) Failure to involve the leadership team and users extensively during the system selection
 E) Turning negotiations into a blood sport
	DB7: Software Application design and use: System Testing and Integration Tools.
	 • Briefly explain the following terms:
	   - System design
	   - System acceptance
	   - System testing Integration tools
	   - System support and evaluation
	 • Choose one of the terms, and explain its importance.
	 • Describe the problems or consequences if not done correctly.

Objective 6   Discuss the process for implementing the HCIS
  A. System Implementation Process
  B. Organize implementation team and identify system champion
  C. Composition and size of implementation team
  D. Primary role and functions of implementation team
  E. Role of system champion
	DB8: System Acquisition and Evaluation
	• Read the overview of a system acquisition and evaluation process
	• Explain vendor/contract management.
	• Research the internet to learn about application service provider (ASP) organizations that offer EHRs to providers.
	• Summarize products form at least 2 different ASPs.
	• What criteria might you use to compare them
	• How do they differ in terms of service, support, and financial arrangements?

Module 5: Technologies Supporting HCIS and Health Care information System Standards

Goal Statement: Learner will be introduced to concepts relating to technologies that support Health Care Information Systems and Health Care information exchanges standards, vocabulary standards and the organizations that develop them.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Explain core technologies supporting Health Care Information Systems
2. Identify major issues in adoptions in Health Care Information technologies
3. Explain the Gartner Hype Cycle
4. Identify the major standards for electronic data interchange.
5. Identify vocabulary, terminology, classification standards.
6. Identify organizations that impact the adoption of standards.
7. Discuss a Nationwide Health Information Network.

Key Terms to Use:

Core Technologies	Data Communications	Data Interchange Standards
Data Management	E-Commerce in Health Care	Effective Communication
Gartner Hype Cycle	HCPCS	Information Distribution Schemes
Internet and Web Applications	Internet and Web Concepts	Nationwide Health Information Network
Remote Access Technologies		

Content Outline*	Suggested Learning Activities
Objective 1 Explain core technologies supporting Health Care Information Systems A) Core Technologies B) Data Management and Access C) Networks and Data Communications D) Information Distribution Schemes E) Remote Access Technologies F) Internet and Web Concepts and Applications G) E-Commerce in Health Care	• Lecture PPT: Technologies Supporting HCIS • Lecture PPT: Health Care information System Standards

Objective 2 Identify major issues in adoptions in Health Care Information technologies
  A) Failure to manage vendor access to organization leadership
  B) Failure to keep the process objectives (getting caught up in the vendor razzle-dazzle)
  C) Overdoing or under-doing the RFP
  D) Failure to involve the leadership team and users extensively during the system selection
    Turning negotiations
  E) Health care executive know when to support the adoption of the "latest and greatest" technologies
  F) The organization acknowledges its current technologies are out-of-date and need upgrading.
  G) Current literature about new technologies is "hype"
  H) New technologies are likely to survive to become industry standards
  I) Health care executives have known that these technologies were here to stay and were something to be managed.
  J) Early adopters of the technologies have an advantage or a disadvantage in the market.
	• VLab Activities: DrChrono Part 1: Getting Started/Navigating EHR Dashboard
	
	• DrChrono Part 2: Registering Patients

Objective 3 Explain the Gartner Hype Cycle (Gartner 2012)
  A) Technology Trigger.
  B) Peak of Inflated Expectations.
  C) Trough of Disillusionment.
  D) Slope of Enlightenment.
  E) Plateau of Productivity**.**
	• Project 3--Evaluation of screen design
	
	• Appendix 5: Project 3 Instructions

Objective 4. Identify the major standards for electronic data interchange .
  A) Organizations
  B) International Organization for Standardization (ISO) www.iso.org
  C) American National Standards Institute (ANSI) www.ansi.org
  D) Standards Development Organizations (SDOs)
  E) ASTM International www.astm.org
  F) Health Level 7 www.hl7.org
  G) ANSI ASC X12 www.x12.org
  H) Classification Standards
	DB 9: Data Interchange Standards
	o Explain data interchange standards and their importance in healthcare.
	o Name some entities that create/develop these standards.
	o Name 3 data interchange standards and briefly explain how they are applicable.

	o Pick and describe on standard in detail.

Objective 5. Identify vocabulary, terminology, classification standards
 	
  A) HCPCS (ancillary services or procedures) (*discussed in Chapter One*)
  B) CPT-4 (physicians procedures) (*discussed in Chapter One*)
  C) ICD-9 (ICD-10 as of October 2014 for diagnoses and hospital inpatient procedures) (*discussed in Chapter One*)
  D) CDT (dental terminology)
  E) NDC (national drug codes) (CMS, 2012a)
  F) Vocabulary and Terminology Standards
  G) National Committee on Vital and Health Statistics (NCVHS) recommends:
  H) Systematized Nomenclature of Medicine—Clinical Terms (SNOMED CT)
  I) Logical Observation Identifiers Names and Codes (LOINC) laboratory subset
  J) Several federal drug terminologies, including RxNorm
  K) HITECH "meaningful use" final rule (discussed in Chapter Four) also includes vocabulary standards, SNOMED CT, LOINC, CVX and RxNorm
  L) National Library of Medicine Unified Medical Language
	DB10: Exchange (HIEs)
	
	• Explain the current trends and challenges in health information exchange between
	  o Employer and health provider
	  o Health providers
	  o Facilities
	• What are the benefits of HIEs?
	• What are the barriers/challenges in the development of HIEs?
	• Briefly describe the 3 models of HIEs.
	• Name best practices for HIEs.

Objective 6. Identify organizations that impact the adoption of standards
 	
  A) Data Interchange Standards
  B) Health Level Seven standards
  C) Digital Imaging and Communications in Medicine (DICOM)
  D) National Council for Prescription Drug Programs (NCPDP)
  E) ANSI X12N standards Note: HIPAA rules require ANSI X12N and NCPCP for electronic transmissions
  F) Health Record Content and Functional Standards
  G) HL7 EHR-S (Electronic Health Record-System) Functional Model
  H) ASTM Health Record Content Standards
  I) Continuity of Care Document
  J) HITECH EHR Certification Criteria	

Objective 7. Discuss a Nationwide Health Information Network
    A) A set of standards, services, and policies that enable the secure exchange of health information over the Internet
    B) Currently twenty-five participating NwHIN organizations, including four federal agencies—CMS, DoD, SSA, and VA—and twenty-one private health care organizations
	Module 5 Quiz

Module 6:   Security of Health Care Information Technologies and Roles responsibilities and major functions of IT in Health Care Organizations

Goal Statement: learner will be introduced to security processes and monitoring, data security processes and describe the components of HIPAA security regulations and introduced to roles, responsibilities, and major functions.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Discuss threats to data security
2. Explain security processes and monitoring and components of HIPAA security regulations
3. Explain the roles and responsibilities of key staff in IT department.
4. Discuss key attributes of highly effective IT organizations

Key Terms to Use:

Human Threats	Technology Malfunctions	Administrative Safeguards
Natural Threats	Viruses	Physical Safeguards
Environmental Threats	HIPAA Security Standards	Technical Safeguards

Content Outline*	Suggested Learning Activities
Objective 1 Discuss threats to data security A) Threats to Health Care Information B) Human Threats C) Natural or Environmental Threats D) Technology Malfunctions E) Intentional or Unintentional F) Internal or External G) Examples H) Viruses—intentional & external I) Installing unauthorized software—intentional or unintentional & internal J) Cause of unintentional may be lack of training	• Lecture PPT: Security of Health Care Information Technologies • Lecture PPT: Roles responsibilities and major functions of IT

Objective 2 Explain security processes and monitoring and components of HIPAA security regulations A) Key Terms B) Covered entity C) Required implementation specification D) Addressable implementation specification E) Administrative Safeguards F) Physical Safeguards G) Technical Safeguards H) Policies, Procedures and Documentation	DB11: Security Concepts and Security Monitoring o Provide a brief overview of security concepts. o Discuss security in wireless environment. Discuss remote access security. DB12: Cloud Computing o What is cloud computing? o What is its role and impact on healthcare? o Name some organizations involved with cloud computing. o Are there any negatives to the use of cloud computing?
Objective 3. Explain the roles and responsibilities of key staff in IT department A) Record processing (assembly and analysis) B) Coding, DRG assignment and abstracting C) Registry and other database management services (Birth Registry, Cancer Registry, Tumor Registry, SPARCS data submission, Hospital-based statistical indices) D) Centralized physician transcription services E) Correspondence and release of information F) Record maintenance (storage and retrieval)	• VLab Activities: DrChrono Part 3; Scheduling Guidelines, EHR Schedule, EHR Clinical • VLab Activities: DrChrono Part 4; Patients, and Authentification • Project 4 Data security and Integrity Plan • Appendix 6: Handout, Project 4 Instructions
Objective 4. Discuss key attributes of highly effective IT organizations	Module 6 Quiz

Module 7: Role of Management in Major Technology Initiatives and Value Realization

Goal Statement: The learner will be introduced to role of management in major IT initiatives and the types of value in HCIT.

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Explain principles for the change management process
2. Describe factors contributing to failures IT initiatives
3. Describe the use of software for the release of information (ROI) process.
4. Outline steps to improve value realization

Key Terms to Use:

Incremental	Fundamental	Project Committees
Project Management	Project Roles	Radical
Step-Shift	Value Diversity	

Content Outline*	Suggested Learning Activities

Objective 1   Explain principles for the change management process
A) Types of Organizational changes
    1) Incremental
    2) Step-shift
    3) Radical
    4) Fundamental
B) Effecting Org Change
    1) Leadership
    2) Language and vision
    3) Connection and trust
    4) Incentives
    5) Plan, Implement and Iterate
C) Project Management
    1) Define scope of project
    2) Accountability
    3) Process for decision making
    4) Tasks – sequencing
    5) Resources, time requirements
    6) communication
D) Project Roles
    1) Business sponsor
	• Lecture PPT: Role of Management in Major Technology Initiatives
	
	• Lecture PPT: Value Realization

2) Business owners
3) Project Managers
E) Project Committees
   1) Steering committee
   2) Project team	

Objective 2   Describe factors contributing to failures IT initiatives.
A) Factors that contribute to IT Initiative Failures
   1) Lack of clarity
   2) Non-believers
   3) Insufficient leadership support
   4) Org inertia/ baggage
   5) Lack of rewards
   6) Lack of candor
   7) Project to complex
   8) Lack of respect
   9) Undernourished initiatives
   10) Failure to anticipate short term disruptions
   11) Invisible progress
   12) Unstable/ immature technology
B) Steps to minimize risk of failure
   1) Ensure objectives are clear
   2) Test the commitment
   3) Conviction
   4) Hammer away the inertia
   5) Remove barriers/ baggage
   6) Review and change the reward system
   7) Accept debate
   8) Reduce the complexity
   9) Understand the need for changes
   10) Appropriately resourced
   11) Limit length of disruption
   12) Communicate the progress
   13) Avoid new technologies
A) Why does IT Investment fail to deliver returns
   1) Fails to clearly link IT investments and organizational strategy
   2) Asks the wrong question
   3) Conducts the wrong analysis
   4) Does not state its investment goals
   5) Does not manage outcomes
   6) Leaps to an inappropriate solution
   7) Mangles the project management
   8) Fails to learn from studies of IT effectiveness
	DB 13: Change Management
	• What is change management?
	• Explain its impact on people, processes during mergers and the implementation of new systems
	
	DB 14: Data Mapping and Data Warehousing
	• What is data mapping and why is it necessary?
	• Provide examples of where data maps can be used in healthcare.
	• What are the types of data maps?
	• What is a data warehouse?
	• Describe its importance and applications in healthcare.

Objective 2 Describe the use of software for the release of information (ROI) process. A) Tracking and monitoring the request from receipt through final disposition B) Processing the request in terms of priority as well as efficiency C) Completion of the request	• VLab Activity: Release of Information (HealthPort) • Appendix 7: Handout Healthport Instructions

Objective 3   Outline steps to improve value realization (VR).
A) The nature of IT value
 1) Tangible and intangible
 2) Significance
 3) Diversity across the IT proposals
 4) Diversity within one proposal
 5) Analysis to the nature of the value
B) Value Diversity
 1) Tangible can be measure in terms of strategic importance
 (a) Growth in market share
 (b) Reduced turnover
 (c) Improved patient satisfaction
  1) Tangible – monetary
   • Increase revenue
   • Reduce labor costs
   • Reduce utilization of ancillary services
  2) Tangible – process improvements
   • Fewer errors
   • Faster turnaround
   • Reduce time to get appointment
 2) Intangible
 (a) Improved decision making
 (b) Improved collaboration
 (c) Increased agility
C) Analyses varies by type of value
 1) See chart on PP Chap 17 slide 6.
D) Steps to improve V R
 1) Make sure homework was completed
 2) Require formal project proposals
 3) Increase accountability for investment results
 4) Conduct post implementation audits
 5) Celebrate value achievement
 6) Leverage organizational governance
 7) Shorten the deliverables cycle
 8) Benchmark value
 9) Communicate value
	Module 7 Quiz

Module 8: Creation of Project Charter

Goal Statement: Students will create project charter for HCIT Project

Module Objectives:

Upon completion of this module, the learner will be able to:
1. Create a project charter
2. Name and briefly describe the use of various types of software used in the completion of the HIM process.

Key Terms to Use:

Encoders	inertia	Project charter
HI systems	HI recognition systems	Voice Recognition technology

Content Outline*	Suggested Learning Activities

Objective 1   Create a project charter
  A) Project Management
    1) Project Charter
      (a) Overview and objectives
      (b) Application features
      (c) Scope and limitations
      (d) Metrics
      (e) Budget and timeline
      (f) Organization
      (g) Management strategies
  B) Project Plan
    1) Phase and tasks
    2) Sequence
    3) Interdependencies
    4) Duration of phases/ tasks
    5) Staff resources
  C) Characteristics of a good project plan and charter
    1) Clear and explicit
    2) Leadership insight and support
    3) Thorough review of timeline and resources
    4) Accountability
    5) Assessment of risks
    6) Contingency plans
  D) The IT Project Proposal
    1) The proposal is the cornerstone of the IT value examination
      (a) Defines intended value
	• Lecture PPT: Sample Project Charter
	
	• Project 5 Charter for HCIT Project
	
	• Appendix 8: Handout: Project Charter Instructions
	
	• VLab Activities: Encoders (3M and Nuance)
	
	• Appendix 8b: Handout, 3M and Nuance Instructions

(b) Presents application
      (c) Reviews related changes, e.g., process re-engineering
      (d) Reviews costs
  2) Sources of value information
      (a) Consultants
      (b) Conferences
      (c) Colleagues
      (d) Publications
      (e) Vendors
E) Common Proposal Problems
  1) Fractions of effort
  2) Reliance on complex behavior
  3) Unwarranted optimism
  4) Shaky extrapolations
  5) Phantom square feet
  6) Underestimation of the effort
  7) Fairy tale savings
  8) Failure to account for post implementation costs
F) What Questions Should We Ask the Business Sponsor
  1) What are the steps and investments, including IT, that we need to take in order to achieve our goals?
  2) Which "business" manager owns the achievement of these goals? Do they have our confidence?
  3) Does the cost, risk and timeframe for the implementation of the set of investments, including the IT investment, seem appropriate given our goals?
  4) Have we assessed the tradeoffs and opportunity costs?
  5) Are we comfortable with our ability to execute?	

Objective 2 Name and briefly describe the use of various types of software used in the completion of the HIM process. A) HI systems B) HI specialty systems C) Voice Recognition Technology	DB15: Software Used in HIM Process Completion • Name and briefly describe the use of various types of software used in the completion of the HIM process. • Include both HI systems and HI

	specialty systems. • Include the value of voice recognition technology. • Explain any one in more detail including the impact on the organization. DB16: Enterprise Information Management: Database Architecture and Design • Discuss the role of peer review in PI. • Provide an example on how peer review led to better quality in healthcare, and improved outcomes.
	Final Exam: Covers modules 1-8