

**Health Science Career Cluster  
Essentials of Health Information Technology  
Course Number 25.49500**

**Course Description:**

Health IT is a growing and expanding industry in Georgia and across the country; therefore, the course takes an overall look at the current state of healthcare in the United States. Students will analyze the larger role that technology and information technology play in the healthcare system, the impact that technology has on the healthcare field, and which careers will be available due to these changes. Terminology utilized in Health IT will be discussed, including Electronic Medical Records (EMR), Electronic Health Records (EHR), Health Informatics, and Health Information Management (HIM). The impact of the American Recovery and Reinvestment Act (ARRA), Health Information Technology for Economic and Clinical Health Act (HITECH), and future legislation act will be evaluated. Students will also investigate the advancement of mobile technology (mhealth) and telemedicine, as well as the benefits. Classrooms should be equipped with technology to embrace the Health IT environment. The prerequisite for this course is Introduction to Healthcare.

**Course Standard 1**

**HS-EHIT-1**

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

**Standard: Demonstrate employability skills required by business and industry.**

The following elements should be integrated throughout the content of this course.

**1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.**

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
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Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

### 1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

### 1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

### 1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

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<b>Workplace Ethics</b>	<b>Personal Characteristics</b>	<b>Employer Expectations</b>	<b>Business Etiquette</b>	<b>Communicating at Work</b>
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

**1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.**

<b>Expected Work Traits</b>	<b>Teamwork</b>	<b>Time Management</b>
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

**1.6 Present a professional image through appearance, behavior, and language.**

<b>On-the-Job Etiquette</b>	<b>Person-to-Person Etiquette</b>	<b>Communication Etiquette</b>	<b>Presenting Yourself</b>
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

**Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:**

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

## Course Standard 2

### HS-EHIT-2

**Evaluate the overall state of healthcare in the United States and the role technology and information technology plays.**

- 2.1 Describe the dynamics of the present state of healthcare in the United States.
- 2.2 Research the history of healthcare in the United States from various viewpoints, including morbidity (infectious and chronic disease), care (low tech, high tech, and personalized), payer (fee for service, employer, government), incentives (procedure based, outcome based), care model (poorly coordinated and episodic, patient centric), and Health IT adoption.
- 2.3 Explain the discrepancy between the healthcare expenditure (GDP) and outcome, including U.S. healthcare rankings by the World Health Organization.
- 2.4 Describe the inefficiencies, duplication of procedures, and sources of errors or mistakes, including the number of injuries and deaths per year.
- 2.5 Describe the role of information technology in healthcare.
- 2.6 Explain the constructive and corrective role that IT can play in healthcare.
- 2.7 Investigate and cite specific examples of the expanding role and use of IT in healthcare over the past decade.
- 2.8 Compare and contrast the increasing uses of IT impacting healthcare for patients, facilities, and medical personnel.

## Course Standard 3

### HS-EHIT-3

**Evaluate career opportunities in Health IT, and the education and training required.**

- 3.1 Investigate the career opportunities associated with the widespread implementation of Health IT within United States healthcare settings.
- 3.2 Evaluate the education and training needed to pursue a career in Health IT and other technology-based careers in healthcare.
- 3.3 Review careers related to various areas of discipline within Health IT, including: physician, clinical, payer, hospital, government, pharmacies, etc.
- 3.4 Research and conduct a presentation on career options available in Health IT, including expanding career opportunities and future career growth.
- 3.5 Explore technology-proficient skills needed and the training required for Health IT industry personnel.

## Course Standard 4

### HS-EHIT-4

**Research the ARRA (American Recovery and Reinvestment Act), the HITECH Act (Health Information Technology Act), and other current legislation and the impact on healthcare.**

- 4.1 Investigate the ARRA and the HITECH act and the impact on the current healthcare system.
- 4.2 Evaluate the objectives and requirements of ARRA and the HITECH Acts.
- 4.3 Evaluate the influence of privacy and security requirements, including the societal impact.
- 4.4 Investigate creative ways to address the social views and economic impact of the healthcare regulations.

## Course Standard 5

### HS-EHIT-5:

**Assess the benefits and challenges of Electronic Health Records (EHR) implementation and the interoperability and coordination of care.**

- 5.1 Explain the definition of EHR and the importance as a component of HITECH.
- 5.2 Describe the benefits of widespread EHR implementation.

- 5.3 Evaluate interoperability and the coordination of care.
- 5.4 Explain the differences between an Electronic Health Record (EHR) and an Electronic Medical Record (EMR).
- 5.5 Describe the challenges associated with EHR implementation.
- 5.6 Explain the positive impact of EHR on the quality and cost containment elements of the U.S. healthcare system.
- 5.7 Review the technology make-up of the EHR system, including accessibility, maintenance, and future growth for EHR.

## Course Standard 6

### HS-EHIT-6

**Discuss key factors, developments, and influences on the evolution of Health IT beginning with the 1950s.**

- 6.1 Research the evolutionary history of the United States Health IT system.
- 6.2 Explain the transition from a purely financial/administrative focus to today's EHR patient focus.
- 6.3 Describe the evolutionary change agent.
- 6.4 Evaluate the gradual introduction of financial, administrative, clinical, departmental, and hospital-wide systems.
- 6.5 Identify the major Health IT landmarks during the evolutionary process.
- 6.6 Assess the role of the intermediate systems, such as CMR, CPR, and EMR by describing the similarities and differences.

## Course Standard 7

### HS-EHIT-7

**Examine the guidelines and rules that govern the implementation and usage of Electronic Health Records.**

- 7.1 Explain the guidelines and rules governing the implementation of EHR.
- 7.2 Describe the role of the Office of the National Coordinator (ONC).
- 7.3 Explain the concept of Meaningful Use, including the goals and associated requirements.
- 7.4 Describe the requirements for meeting the Meaningful Use and the applicable conditions for each stage.
- 7.5 Investigate the creation of EHR, including the reason for creation and the intended use.
- 7.6 Present the technology used and required to create and maintain EHR, including local medical facility use to patient access.

## Course Standard 8

### HS-EHIT-8

**Evaluate the organizational structure of healthcare and the continuum of care relating to medical records and pay structure for services.**

- 8.1 Describe the continuum of care, including primary care and associated services, secondary care and associated services, and tertiary care.
- 8.2 Describe the differences between types of hospitals.
- 8.3 Explain the role of alternative care facilities.
- 8.4 Evaluate the pay structure for healthcare.
- 8.5 Explain how patient medical records are kept throughout the continuum of care.

## Course Standard 9

### HS-EHIT-9

**Demonstrate the usage of terminologies and classification in healthcare.**

- 9.1 Discuss the important terminologies and concepts in healthcare including:
  - Current Procedural Terminology (CPT codes)
  - International Classification of Disease (ICD codes)
  - Diagnostic Related Group code (DRG codes)

- Health Level 7 (HL-7) communication standards
  - SNOMED CT (Systematized Nomenclature of Medicine Clinical Terms)
- 9.2 Explain the differences between terminologies and classifications in healthcare.
- 9.3 Utilize commonly used acronyms and terminologies in Health IT.

### Course Standard 10

#### HS-EHIT-10

**Examine and explain IT services in hospitals and the major functional categories.**

- 10.1 Differentiate between hospital-based IT and provider-office IT systems.
- 10.2 Explain the basic hospital IT infrastructure.
- 10.3 Describe a hospital IT organization and leadership.
- 10.4 Explain the variety of IT services in a hospital.
- 10.5 Investigate the major functional categories of Health IT in hospitals and the related administrative, financial, and clinical applications.

### Course Standard 11

#### HS-EHIT-11

**Research the use of mobile technology and other medical devices in healthcare (mhealth) and the benefits to patients and healthcare providers.**

- 11.1 Examine how the use of mhealth can result in lower healthcare costs.
- 11.2 Explore various methods of remote monitoring, including cardiac and diabetic conditions.
- 11.3 Investigate how mobile technology is utilized by pharmacies to promote patient compliance and examine the impact of E-prescribing.
- 11.4 Examine the usage of mobile apps to encourage healthy lifestyles and preventative care.
- 11.5 Research the current trends in mhealth and the different practices in healthcare.

### Course Standard 12

#### HS-EHIT-12

**Explore the benefits and applications of telemedicine and telehealth.**

- 12.1 Research the expanding usage of telehealth and telemedicine.
- 12.2 Differentiate between telemedicine and telehealth, including the services provided.
- 12.3 Investigate the benefits of telehealth to various audiences.
- 12.4 Examine the clinical applications, including telemedicine consultation and examination.
- 12.5 Evaluate how telemedicine can be utilized in school-based clinics.

### Course Standard 13

#### HS-EHIT-13

**Explore how related student organizations are integral parts of career and technology education courses through leadership development, school, and community service projects, entrepreneurship development, and competitive events.**

- 13.1 Research the history of Future Business Leaders of America (FBLA) and/or Future Health Professionals (HOSA).
- 13.2 Discuss the mission, purpose, motto, colors, official dress, and other distinguishing characteristics of FBLA and/or HOSA.
- 13.3 Explain how participation in FBLA and/or HOSA can promote lifelong responsibility for community service and professional growth and development.
- 13.4 Create a personal leadership plan to participate in programs, conferences, community service and competitive events on the local, state, and national level that align with the competencies, skills, and knowledge of this course.