



# INSTRUCTIONAL PACKAGE

HIM 266

Computers in Healthcare

Effective Term  
Spring/2020

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## Part I: Course Information

Effective Term: 201920

COURSE PREFIX: HIM 266

COURSE TITLE: Computers in Healthcare

CONTACT HOURS: 3.0

CREDIT HOURS: 3.0

### RATIONALE FOR THE COURSE:

The course provides the student with basic knowledge and skills of computerized medical record systems needed for patient data input, insurance billing, and appointment scheduling, and creating common medical record reports. The basics mechanics of EHRs, EMRs, and PHRs will be explored in addition to the ARRA/HITECH laws to prepare students to competently perform the duties of administrative tasks within any healthcare organization.

### COURSE DESCRIPTION:

This course covers hardware and software components of computers for medical record applications, methods of controlling accuracy and security of data in computer systems, record linkage, and data sharing concepts.

### PREREQUISITES/CO-REQUISITES:

Credit level [HIM 103](#) Minimum Grade of C or Credit level [HIM 103](#) Minimum Grade of TC

### REQUIRED MATERIALS:

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

[BOOKSTORE](#).

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

### TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials. WaveNet and D2L email access.

### STUDENT IDENTIFICATION VERIFICATION

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

**NETIQUETTE:** is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit [Online Netiquette](#).

## Part II: Student Learning Outcomes

### COURSE LEARNING OUTCOMES and ASSESSMENTS\*:

Upon completion of this course, the student will be able to:

1. Comprehend basic principles and concepts of electronic health records and healthcare computer systems.
2. Understand the history, influence, and national regulations of computers in healthcare
3. Apply confidentiality, security, quality, integrity, and reliability concerns to Information Systems in the Healthcare industry.
4. Explore the concepts of PHRs (Personal Health Records)
5. Apply knowledge of legal standards pertaining to computerized medical records, protected health information, and HIPAA with special implications for telemedicine and e-health.
6. Explore the ARRA/HITECH/Meaningful Use requirements for the Healthcare industry and RHIOs/HIEs/RECs
7. Students will become familiar with their states/geographical area's efforts to

#### Module 1:

**Materials Covered:** Readings Chapter 1: Introduction to Information Systems in Health Information Management

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

#### Learning Outcomes:

Identify and discuss the impact of computers on healthcare.

Discuss the history of computers in healthcare.

Compare and contrast the similarities and differences among the Internet, intranet, and extranet as used in healthcare.

Explain data analytics and health informatics and how information systems apply.

#### Module 2:

**Materials Covered:** Readings Chapter 2: Information Integrity and Data Quality

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

#### Learning Outcomes:

Identify the various data sources that populate the electronic health record.

List and give an example of each of the American Health Information Management Association data quality management model characteristics.

Choose the appropriate field type for a data element.

Make recommendations to address data quality and data integrity issues

Comply with the federal mandates for HIEs, RECs, and RHIOs

### **Module 3:**

**Materials Covered:** Readings Chapter 3: Databases

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

#### **Learning Outcomes:**

Assist in the development of a database. Develop and manage the data dictionary.

Develop queries to retrieve data contained in the database. Read and understand an entity-relationship diagram.

Identify the primary key contained in an entity.

Differentiate between a data repository and a data warehouse. Expound on the ways that data mining can be useful.

Complete simple normalization of data. Differentiate between the various types of data.

### **Module 4:**

**Materials Covered:** Readings Chapter 4: System Selection

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

#### **Learning Outcomes:**

Identify the steps in the system selection process.

Develop the request for proposal.

Explain how the decision matrix will assist in the most appropriate selection for the healthcare entity.

Collect data to be used in the systems analysis process

### **Module 5:**

**Materials Covered:** Readings Chapter 5: System Implementation

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

#### **Learning Outcomes:**

Identify the steps in system implementation.

Make recommendations for the testing and implementation of the information system. Develop training materials and conduct training classes for users.

Recommend conversion needed for data being transferred from existing system.

### **Module 6:**

**Materials Covered:** Readings Chapter 6: Computers in HIM

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

#### **Learning Outcomes:**

Identify the information systems needed to support efficient operations in the health information management (HIM) department.

Differentiate between the various software products used in the HIM department. Improve the quality of the data within the HIM systems.

**Module 7:**

**Materials Covered:** Readings Chapter 7: Administrative Information Systems **Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

**Learning Outcomes:**

Determine what administrative information system is needed for a particular task. Differentiate among the administrative information systems.

Differentiate between a decision support system and an executive information system. Describe how administrative systems impact health information management practices.

**Module 8:**

**Materials Covered:** Readings Chapter 8: Clinical Information Systems

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

**Learning Outcomes:**

Differentiate between the various clinical information systems. Define clinical information system.

Determine what clinical information system is needed to meet the needs of the healthcare facility.

Make recommendations on the use and implementation of document management systems.

**Module 9:**

**Materials Covered:** Readings Chapter 9: Electronic Health Record

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

**Learning Outcomes:**

Create a development and implementation plan for an electronic health record (EHR). Explain the role of clinical vocabularies in the EHR.

Support the need for and address issues related to the EHR.

Educate the provider on benefits of the EHR.

Identify the need for the multiple information systems required to support the EHR. Support the need for the personal health record.

**Module 10:**

**Materials Covered:** Readings Chapter 10: Consumer Informatics

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

**Learning Outcomes:**

Explain consumer informatics.

Differentiate between the patient portal and a personal health record. Explain impact of health literacy on patients.

## **Module 11:**

**Materials Covered:** Readings Chapter 11: Health Information Exchange **Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

### **Learning Outcomes:**

Articulate how the concept of the health information exchange (HIE) is a positive step for healthcare.

Describe the role and functions of the health information organization (HIO) in the HIE efforts. Explain the concept of interoperability and its importance in healthcare.

Understand the history and growth of Health Information Exchange (HIE) over the last several decades.

Describe the benefits and barriers of Health Information Exchange (HIE). Compare and contrast the models and methods of HIE.

Explain the requirements of Meaningful Use

## **Module 12:**

**Materials Covered:** Readings Chapter 12: Standards

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

### **Learning Outcomes:**

Explain the necessity for standards in health information technology (HIT).

Explain how Health Level Seven International (HL7) influences healthcare data standards. Clarify the difference between the continuity of care record and the continuity of care document.

Compare and contrast data content standards, vocabulary standards, and messaging standards.

Describe how Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) works to achieve uniform terminology.

Identify the need for mapping

Differentiate among national drug codes (NDC), RxNorm, and National Council for Prescription Drug Programs (NCPDP).

## **Module 13:**

**Materials Covered:** Readings Chapter 13: Security

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

### **Learning Outcomes:**

Educate staff on security issues. Discuss federal security regulation. Recommend security measures.

Develop policies and procedures on security practices. Control access to protected health information.

Conduct audit for security violation.

## **Module 14:**

**Materials Covered:** Readings Chapter 14: Information and Data Governance **Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

### **Learning Outcomes:**

Compare and contrast information governance (IG) with data governance (DG) and their relative significance.

Explain the importance of enterprise information management (EIM) and why it has become essential

Explain the reasons why health information has become a valued strategic asset. Summarize the eight key principles of Information Governance Principles for Healthcare (IGPHC).

Identify tools that can be used to assist a healthcare organization in implementing an IG program.

## **Module 15:**

**Materials Covered:** Readings Chapter 15: Role of HIM Professionals in Information Systems

**Assessment(s):** Weekly Discussions, Assignments, Quizzes/Tests, & Final Exam/Project (if required)

### **Learning Outcomes:**

Compare various technology-driven roles performed by health information management (HIM) professions.

Identify information technology tasks performed by HIM professionals in traditional and non-traditional settings.

Explain why HIM professionals are qualified for the various technology-driven roles.

***\*Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

## **Part III: Grading and Assessment**

### **EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS\***

Students’ performance will be assessed and the weight associated with the various measures/artifacts are listed below.

#### **EVALUATION\***

Weekly Discussions	20%
Homework Assignments	40%
Quizzes/Tests	30%
Final Exam	10%

### **GRADING SYSTEM:**

State the College’s or departmental grading system as delineated in the Catalog. Please note the College adheres to a 10 point grading scale A = 100 – 90, B = 89- 80, C = 79 – 70, D = 69 – 60, F = 59 and below. You must have your Dean’s approval if changes in the scale are made.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop ([ACADEMIC CALENDAR](#)). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly

**\*Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.**

## **Effective Professional and Interpersonal Communication (EPIC)**

This course fulfills HGTC's Quality Enhancement Plan for Effective Professional and Interpersonal Communication. Upon completion of this course, students will be able to:

(Check all that apply.)

- Utilize appropriate communication formats when conveying professional and interpersonal thoughts and ideas.
- Apply appropriate language when speaking and writing for their chosen field of study or industry.
- Demonstrate appropriate communication techniques when engaging audiences.

### **Part IV: Attendance**

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

**For online and hybrid courses**, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

### **Part V: Student Resources**



#### **The Student Success and Tutoring Center (SSTC)**

The SSTC offers to all students the following **free** resources:

- 1. Academic coaches** for most subject areas, **Writing Center Support**, and **college success skills.**
- 2. On-line student success and academic support resources.**

Visit the SSTC website: [Student Success & Tutoring Center](#) and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455 or go to the [Online Resource Center](#) to access on-demand resources any time.



## **TECH Central – Student Information Center**



TECH Central provides quality enrollment and collegiate guidance for students, faculty, and staff. Services include phone, walk-in, and online technical support for technology training and troubleshooting. Additionally, we offer support in Office 365, Outlook E-mail setup, and ID cards.

**Phone:** 843-349-5340

**Email:** [techcentral@hgtc.edu](mailto:techcentral@hgtc.edu)

**Text:** 843-357-8552

**TECH Talk (Live Chat):** Located on the “Home” tab in WaveNet.

**Website:** [www.hgtc.edu/techcentral](http://www.hgtc.edu/techcentral)

### **Locations:**

Conway Building 1100, Room 132D

Grand Strand Building 200, Room 136

**Student Testing:** (If course is offered in multiple format include this section, delete if only F2F sections are offered.)

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through RPNOW, our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC’s Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

### **Disability Services:**

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student’s disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student’s responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

## Statement of Equal Opportunity/Non-Discrimination Statement

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

Inquiries regarding the non-discrimination policies: Students and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs, Dr. Melissa Batten, VP Student Affairs, Title IX Coordinator, Building 1100, Room 107A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5228, [Melissa.Batten@hgtc.edu](mailto:Melissa.Batten@hgtc.edu). Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources, Jacquelyne Snyder, VP Human Resources, Section 504, Title II, and Title IX Coordinator, Building 200, Room 212A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, [Jacquelyne.Snyder@hgtc.edu](mailto:Jacquelyne.Snyder@hgtc.edu).

### Title IX Requirements

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college’s Chief Student Services Officer, campus law enforcement, or with the college’s Title IX Coordinator, or designee.

\*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

<p><b>Inquiries regarding the non-discrimination policies:</b></p>	
<p>Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.</p>	<p>Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.</p>
<p><b>Dr. Melissa Batten, VP Student Affairs</b> <i>Title IX Coordinator</i></p> <p>Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 <a href="mailto:Melissa.Batten@hgtc.edu">Melissa.Batten@hgtc.edu</a></p>	<p><b>Jacquelyne Snyder, VP Human Resources</b> <i>Section 504, Title II, and Title IX Coordinator</i></p> <p>Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 <a href="mailto:Jacquelyne.Snyder@hgtc.edu">Jacquelyne.Snyder@hgtc.edu</a></p>

