

McDowell Technical Community College

HIT Curriculum Course Descriptions and ONC HIT Professional Exam Competency Exam Blueprints (Practice Workflow Role)

Currently Existing HIT Course	ONC Module Component	Topics Covered by Components
<p>HIT 225 Healthcare Informatics This course covers data analysis to support decision making, patient care, and regulatory compliance. Topics include clinical terminology and vocabulary systems, data capture methodology, data presentation and reporting, and initiatives to improve the quality of patient care. Upon completion, students should be able to identify data elements and sets, analyze capture methodology in healthcare settings, analyze compliance issues and make improvement recommendations.</p> <p>HIT 110 Fundamentals of HIM This course introduces Health Information Management (HIM) and its role in healthcare delivery systems. Topics include standards, regulations, and initiatives; payment and reimbursement systems and healthcare providers and disciplines; and Electronic Health Records (EHRs). Upon completion, students should be able to demonstrate an understanding of health information management and healthcare organizations, professions, and trends.</p> <p>HIT 112 Health Law & Ethics This course covers legislative and regulatory processes, legal terminology, and professional-related and practice-related ethical issues. Topics</p>	<p>Comp 4 – Introduction to Information and Computer Science This unit introduces basic computing concepts and terminology. It identifies common elements of computers, both in terms of hardware and software and provides information on selecting a computer by discussing the range of computer types, from desktops to laptops to servers. Finally, it provides a history of the development of computing and healthcare information systems over time.</p> <p>Comp 5 – History of Health Information Technology in the US This component traces the development of IT systems in health care and public health, beginning with the experiments of</p>	<ul style="list-style-type: none"> • Basic Computing Concepts, Including History • Internet and World Wide Web • Computer Hardware • Computer Software • Computer Programming • Databases and SQL • Networks • Security • Information Systems • Future of Computing <ul style="list-style-type: none"> • Evolution of Health IT • Evolution of Health IT: Modern Era • Evolution of Health IT: The HITECH Act

<p>include confidentiality; privacy and security policies, procedures and monitoring; release of information policies and procedures; and professional-related and practice-related ethical issues. Upon completion, students should be able to apply policies and procedures for access and disclosure of Protected Health Information and apply and promote ethical standards. This course is also available through the Virtual Learning Community (VLC).</p> <p>HIT 122 Professional Practice Experience I This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.</p> <p>HIT 124 Professional Practice Experience II This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.</p> <p>HIT 222 Professional Practice Experience III This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the</p>	<p>the 1950s and 1960s and culminating in the HITECH act, including the introduction of the concept of “meaningful use” of electronic health records.</p>	<ul style="list-style-type: none"> • Evolution of Public Health Informatics • History of Electronic Health Records • History of Clinical Decision Support • History of CPOE and E-Prescribing • History of HIE • History of Privacy and Security Legislation • Software Certification and Regulation • History of Mobile Computing • History of Telemedicine • History of Quality Improvement and Patient Safety • Payment-Related Issues and the Role of HIT • History of Health IT Organizations
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<p>healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.</p>		
<p>MED 121 Medical Terminology I This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. (*VLC)</p> <p>MED 122 Medical Terminology II This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. (*VLC)</p> <p>BIO 168 Anatomy and Physiology I This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology,</p>	<p>Comp 3 - Terminology in Healthcare and Public Health Settings Explanation of specific terminology used by workers in healthcare and public health. Note that is NOT a course in data representation or standards</p>	<ul style="list-style-type: none"> • Understanding Medical Words • Integumentary system • Musculoskeletal system • Blood, Lymphatic and Immune system • Cardiovascular System • Endocrine System • Ears, Nose, Throat, Eye and Vision • Nervous System • Reproductive System • Respiratory System • Urinary System • Public Health and Healthcare System Terminology • What is Health information Management and Technology? • Electronic Health Records • Standards to promote Health Information Exchange

<p>histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.</p> <p>BIO 169 Anatomy and Physiology II This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement</p> <p>HIT 226 Principles of Disease This course covers disease etiology and organ system involvement, including physical signs and symptoms, prognoses, and common complications and their management. Topics include basic</p>		
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<p>microbiology, basic pharmacology, and principles of disease. Upon completion, students should be able to relate disease processes to etiology, physical signs and symptoms, prognosis, and common complications and their management.</p>		
<p>HIT 225 Healthcare Informatics This course covers data analysis to support decision making, patient care, and regulatory compliance. Topics include clinical terminology and vocabulary systems, data capture methodology, data presentation and reporting, and initiatives to improve the quality of patient care. Upon completion, students should be able to identify data elements and sets, analyze capture methodology in healthcare settings, analyze compliance issues and make improvement recommendations.</p> <p>HIT 221 Lifecycle of EHR This course covers the system selection, design and implementation of an electronic health record (EHR) in integrated delivery networks. Topics include the system development life cycle, analysis of existing systems, required resources, and common resource constraints. Upon completion, students should be able to understand system development life cycles, analyze design and engineering, and make recommendations to improve efficiency of operations.</p>	<p>Comp 6 - Health Management Information Systems A “theory component, specific to healthcare and public health applications. Introduction to health IT standards, health-related data structures, software applications; enterprise architecture in health care and public health organizations</p>	<ul style="list-style-type: none"> • What is Health Informatics • Health Information Systems Overview • Electronic Health Records • Computerized Provider Order Entry (CPOE) • Clinical Decision Support Systems • Patient monitoring Systems • Medical Imaging Systems • Consumer Health Informatics • Administrative, Billing, and Financial Systems

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<p>emphasis on electronic health records (EHR). Topics include leadership development skills, interdisciplinary collaboration, organizational change management, project management software, and the study of communication skills required across healthcare disciplines. Upon completion, students should be able to effectively collaborate and communicate with healthcare disciplines to implement informatics projects within the healthcare setting.</p>		
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		<ul style="list-style-type: none"> • Privacy, Confidentiality, and Security Issues and Standards • Health Information Exchange
<p>HIT 227 Informatics Project Management This course covers the required skills needed for implementing healthcare IT applications, with emphasis on electronic health records (EHR). Topics include leadership development skills, interdisciplinary collaboration, organizational change management, project management software, and the study of communication skills required across healthcare disciplines. Upon completion, students should be able to effectively collaborate and communicate with healthcare disciplines to implement informatics projects within the healthcare setting.</p>	<p>Comp 10 - Fundamentals of Health Workflow Process Analysis & Redesign Fundamentals of health workflow process analysis and redesign as a necessary component of complete practice automation; includes topics of process validation and change management.</p>	<ul style="list-style-type: none"> • Concepts of Processes and Process Analysis • Internet and the World Wide Web • Computer Hardware • Computer Software • Computer Programming • Databases and SQL • Networks • Security • Information Systems • Future of Computing
<p>HIT 225 Healthcare Informatics This course covers data analysis to support decision making, patient care, and regulatory compliance. Topics include clinical terminology and vocabulary systems, data capture methodology, data presentation and reporting, and initiatives to improve the quality of patient care. Upon completion, students should be able to identify data elements and sets, analyze capture methodology in healthcare</p>	<p>Comp 11 - Configuring EHRs A practical experience with a laboratory component, addressing approaches to assessing, selecting, and configuring EHRs to meet the specific needs of customers and end-users.</p>	<ul style="list-style-type: none"> • Migration to an Electronic Health Record System • Patient Care Clinical Workflow; Multiple Perspectives of Patient Care (VistA Demo) • Implementing Clinical Decision Support (VistA Demo)

<p>settings, analyze compliance issues and make improvement recommendations.</p> <p>HIT 221 Lifecycle of EHR This course covers the system selection, design and implementation of an electronic health record (EHR) in integrated delivery networks. Topics include the system development life cycle, analysis of existing systems, required resources, and common resource constraints. Upon completion, students should be able to understand system development life cycles, analyze design and engineering, and make recommendations to improve efficiency of operations.</p> <p>HIT 227 Informatics Project Management This course covers the required skills needed for implementing healthcare IT applications, with emphasis on electronic health records (EHR). Topics include leadership development skills, interdisciplinary collaboration, organizational change management, project management software, and the study of communication skills required across healthcare disciplines. Upon completion, students should be able to effectively collaborate and communicate with healthcare disciplines to implement informatics projects within the healthcare setting.</p>		<ul style="list-style-type: none">• Building Order Sets (VistA Demo)• Templates• Health Summary and Clinical Reminder Reports (VistA Demo)• Privacy and Security in the US• Meaningful Use and Implementation
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<p>HIT 216 Quality Management This course introduces principles of quality assessment and improvement, and utilization, risk, and case management, in healthcare. Topics include Continuous Quality Improvement, and case management processes, data analysis/reporting techniques, credentialing, regulatory quality monitoring requirements, and outcome measures and monitoring. Upon completion, students should be able to abstract, analyze, and report clinical data for facility-wide quality management/performance improvement programs and monitor compliance measures.</p> <p>HIT 227 Informatics Project Management This course covers the required skills needed for implementing healthcare IT applications, with emphasis on electronic health records (EHR). Topics include leadership development skills, interdisciplinary collaboration, organizational change management, project management software, and the study of communication skills required across healthcare disciplines. Upon completion, students should be able to effectively collaborate and communicate with healthcare disciplines to implement informatics projects within the healthcare setting.</p>	<p>Comp 12 - Quality Improvement Introduces the concepts of health IT and practice workflow redesign as instruments of quality improvement. Addresses establishing a culture that supports increased quality and safety. Discusses approaches to assessing patient safety issues and implementing quality management and reporting through electronic systems.</p>	<ul style="list-style-type: none"> • Introduction to Quality Improvement and Health Information Technology • Principles of Quality and Safety for HIT • Introduction to Reliability • Reliability and Culture of Safety • Decision Support for Quality Improvement • Workflow Design • HIT Design to Support Teamwork and Communication • HIT and Infecting a Patient Safety Culture • HIT Implementation Planning for Quality and Safety • Measuring Quality • Data Quality Improvement • Learning from Mistakes: Error Reporting and Analysis and HIT
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<p>HIT 218 Management Principles in HIT This course covers organizational management concepts as applied to healthcare settings. Topics include roles/functions of teams/committees, leadership, communication and interpersonal skills, designing and implementing orientation/training programs, monitoring workflow, performance standards, revenue cycles, and organizational resources. Upon completion, students should be able to apply management, leadership, and supervisory concepts to various healthcare settings.</p> <p>HIT 225 Healthcare Informatics This course covers data analysis to support decision making, patient care, and regulatory compliance. Topics include clinical terminology and vocabulary systems, data capture methodology, data presentation and reporting, and initiatives to improve the quality of patient care. Upon completion, students should be able to identify data elements and sets, analyze capture methodology in healthcare settings, analyze compliance issues and make improvement recommendations.</p> <p>HIT 122 Professional Practice Experience I This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should</p>	<p>Comp 15 - Usability and Human Factors Discussion of rapid prototyping, user-centered design and evaluation, usability; understanding effects of new technology and workflow on downstream processes; facilitation of a unit-wide focus group or simulation.</p>	<ul style="list-style-type: none"> • People and Technology, Studies of Technology • Requirements Engineering • Cognition and Human Performance • Human Factors and Healthcare • Usability evaluation methods • Electronic Health Records and Usability • Clinical Decision Support and Usability • Approaches to Design • Ubiquitous Computing • Designing for Safety • Designing for Safety • Information Visualization
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<p>be able to apply health information theory to healthcare facility practices.</p> <p>HIT 124 Professional Practice Experience II This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.</p> <p>HIT 222 Professional Practice Experience III This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.</p>		
<p>HIT 218 Management Principles in HIT This course covers organizational management concepts as applied to healthcare settings. Topics include roles/functions of teams/committees, leadership, communication and interpersonal skills, designing and implementing orientation/training programs, monitoring workflow, performance standards, revenue cycles, and organizational resources. Upon completion, students should be able to apply management, leadership, and supervisory concepts to various healthcare settings.</p>	<p>Comp 16 - Professionalism/Customer Service in the Health Environment Development of skills necessary to communicate effectively across the full range of roles that will be encountered in healthcare and public health settings.</p>	<ul style="list-style-type: none"> • Customer Service in Healthcare IT • Professional Behavior in the Healthcare Environment • Overview of Communication Relevant to Health IT • Key Elements of Effective Communication • Regulatory Issues: HIPAA and Standard Precautions

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<p>HIT 218 Management Principles in HIT This course covers organizational management concepts as applied to healthcare settings. Topics include roles/functions of teams/committees, leadership, communication and interpersonal skills,</p>	<p>Comp 17 - Working in Teams An experiential course that helps trainees become “team players” by understanding their roles, the importance of communication, and group cohesion.</p>	<ul style="list-style-type: none"> • Health IT Teams: Examples and Characteristics • Forming and Developing a Team for HIT

<p>designing and implementing orientation/training programs, monitoring workflow, performance standards, revenue cycles, and organizational resources. Upon completion, students should be able to apply management, leadership, and supervisory concepts to various healthcare settings.</p> <p>HIT 216 Quality Management This course introduces principles of quality assessment and improvement, and utilization, risk, and case management, in healthcare. Topics include Continuous Quality Improvement, and case management processes, data analysis/reporting techniques, credentialing, regulatory quality monitoring requirements, and outcome measures and monitoring. Upon completion, students should be able to abstract, analyze, and report clinical data for facility-wide quality management/performance improvement programs and monitor compliance measures</p> <p>HIT 122 Professional Practice Experience I This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to</p>		<ul style="list-style-type: none"> • Initial Tools for Teaming: Ground Rules & Action Plans for HIT Teams • Team Strategies and Tools to Enhance Performance and Patient Safety: TeamSTEPPS • Leveraging Integration Techniques: Power of HIT Team Dynamics • Articulating Feedback and Feedforward: Tracking Success and Change • Leadership: All Members as Leaders—Leaderful Teams • Sharing Resources and Information: Tools to Optimize Performance of HIT Teams • Positioning for High Performance Teaming: Challenges and Opportunities in the HIT Environment • Barriers to Success: Reading Early Warning Signs of HIT Team Failure • Life Cycle of HIT Teams:
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<p>healthcare facility practices.</p> <p>HIT 124 Professional Practice Experience II This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.</p> <p>HIT 222 Professional Practice Experience III This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.</p>		<p>Reforming and Repositioning Techniques</p>
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