

# NCHSE National Health Science Assessment Success Guide

*Updated August 2020*

## Overview

This document is designed to give instructors guidance on preparing students for the NCHSE National Health Science Assessment.

The National Consortium for Health Science Education (NCHSE) designed this assessment as an end-of-program exam, taking multiple years of health science education into account.

***This document is based on the May 2019 Standards.***

## Outline

In this guide, you will find:

1. Information about the NCHSE National Health Science Assessment
2. A breakdown of the NCHSE National Health Science Assessment topics
3. HealthCenter21 modules recommended for exam prep
4. An in-depth crosswalk of HealthCenter21 to the NCHSE assessment

## 1. About the NCHSE National Health Science Assessment\*

The National Health Science Assessment is a knowledge-based assessment with 105 test items including Multiple Choice, Labeling, Matching and Sequencing/Ordering items. Questions require simple recall as well as critical thinking.

The assessment is designed to measure student knowledge for the NCHSE National Health Science Standards and is administered by Precision Exams.

### Resources to learn more about the NCHSE National Health Science Assessment and Standards:

- General Information - <https://www.healthscienceconsortium.org/assessment/>
- 2019 National Health Science Standards - [https://www.healthscienceconsortium.org/wp-content/uploads/2019/05/NATIONAL\\_HEALTH\\_SCIENCE\\_STANDARDS\\_MAY\\_2019\\_FINAL.pdf](https://www.healthscienceconsortium.org/wp-content/uploads/2019/05/NATIONAL_HEALTH_SCIENCE_STANDARDS_MAY_2019_FINAL.pdf)
- 2018 Sample Exam - <http://www.precisionexams.com/nchse/welcome/file/NHSA-30-Sample-Test-Questions.pdf>
- 2018 Sample Exam Key - <http://www.precisionexams.com/nchse/welcome/file/NHSA-30-Sample-Test-Questions-KEY.pdf>
- NCHSE's Education Resources - <http://www.healthscienceconsortium.org/resources/>

*\*Note: Some of the resources and information have not been updated by NCHSE since the release of the May 2019 version of the National Health Science Standards.*

*This is the most up-to-date information AES has available as of August 2020.*

## 2. NCHSE National Health Science Assessment Topic Breakdown

The National Health Science Assessment measures knowledge by asking questions across 11 standards.

Each standard has a varying number of items that contributes to a percentage of the overall assessment score.

STANDARD	Total Items per Standard	Total Points per Standard	Percent of Total Points
1 - Academic Foundation	17	20	18%
2 - Communications	10	10	9%
3 - Systems	5	5	5%
4 - Employability Skills	14	15	14%
5 - Legal Responsibilities	13	13	12%
6 – Ethics	4	4	4%
7 - Safety Practices	17	18	16%
8 – Teamwork	6	6	5%
9 - Health Maintenance Practices	10	10	9%
10 - Technical Skills	5	5	5%
11 - Information Technology in Healthcare	4	4	4%

### 3. HealthCenter21 Modules Recommended for the NCHSE Assessment

The NCHSE National Health Science Assessment is designed as an end-of-program assessment and includes a broad variety of topics.

There HealthCenter21 modules that help prepare students for the NCHSE National Assessment are:

- Anatomy and Physiology
- Behavioral Health
- Bloodborne Pathogens
- Client Status
- Communications
- CPR and Basic Life Support
- Cultural, Social and Ethnic Diversity
- Customer Service
- Diseases and Disorders
- Emergency Care
- Healthcare Systems
- Health Career Exploration
- Health Information Technology
- EHR Simulation
- Human Growth & Development
- Infection Control
- Insurance and Coding
- Job Seeking Skills
- Legal and Ethical Responsibilities
- Medical Mathematics
- Medical Terminology
- Personal Qualities
- Professionalism
- Safety Precautions
- The Health Assistant
- Wellness and Nutrition

**See the next page for an in-depth crosswalk between HealthCenter21 and the NCHSE National Assessment.**

The coverage of each topic within HealthCenter21 is broken down as being High, Medium, Low, or Not Covered.

#### 4. Crosswalk Between the NCHSE Assessment & HealthCenter21

Foundation Standard 1: Academic Foundation	HealthCenter21 Location	HealthCenter21 Coverage
<i>Understand human anatomy, physiology, common diseases and disorders, and medical math principles.</i>		
<b>1.1 Human Anatomy and Physiology</b>		
1.11 Describe the organization of the human body and directional terms.		
a. Identify Levels of Organization <ul style="list-style-type: none"> <li>• Chemical</li> <li>• Cellular</li> <li>• Tissue</li> <li>• Organ</li> <li>• System</li> <li>• Organism</li> </ul>	<b>Module:</b> Anatomy and Physiology Unit: Intro to Anatomy and Physiology	<b>High</b>
b. Demonstrate anatomical position	<b>Module:</b> Medical Terminology Unit: Anatomic References	<b>High</b>
c. Identify body planes <ul style="list-style-type: none"> <li>• Sagittal</li> <li>• Midsagittal</li> <li>• Coronal / Frontal</li> <li>• Transverse / Horizontal</li> </ul>	<b>Module:</b> Medical Terminology Unit: Anatomic References	<b>Medium</b>
d. Use directional terms <ul style="list-style-type: none"> <li>• Anterior / Posterior</li> <li>• Medial / Lateral</li> <li>• Proximal / Distal</li> <li>• Superficial / Deep</li> <li>• Superior / Inferior</li> <li>• Ventral / Dorsal</li> </ul>	<b>Module:</b> Medical Terminology Unit: Anatomic References	<b>Medium</b>

<p>e. Identify body cavities</p> <ul style="list-style-type: none"> <li>• Abdominal</li> <li>• Cranial</li> <li>• Dorsal</li> <li>• Pelvic</li> <li>• Spinal</li> <li>• Thoracic</li> </ul>	<p><b>Module:</b> Medical Terminology Unit: Anatomic References</p>	<p><b>Medium</b></p>
<p>f. Identify the components of the abdominal quadrants</p> <ul style="list-style-type: none"> <li>• Right upper</li> <li>• Right lower</li> <li>• Left upper</li> <li>• Left lower</li> </ul>	<p><b>Module:</b> Medical Terminology Unit: Anatomic References</p>	<p><b>Medium</b></p>
<p>1.1.2 Identify basic structures and describe functions of human body systems.</p>		
<p>a. Skeletal</p> <ul style="list-style-type: none"> <li>• Structures of the skeletal system <ul style="list-style-type: none"> <li>○ Distinguish between axial and appendicular skeletons</li> <li>○ Describe long bone anatomy</li> <li>○ Identify joint types and movement</li> <li>○ Name and classify all bones (206)</li> </ul> </li> <li>• Functions of the skeletal system <ul style="list-style-type: none"> <li>○ Structure and support</li> <li>○ Muscle attachment and movement</li> <li>○ Mineral storage</li> <li>○ Hematopoiesis</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Skeletal System</p>	<p><b>Medium</b> Not mentioned: Mineral Storage and Hematopoiesis</p>
<p>b. Muscular</p> <ul style="list-style-type: none"> <li>• Structures of the muscular system <ul style="list-style-type: none"> <li>○ Identify types of muscle tissue</li> <li>○ Identify major muscle groups of neck, shoulder, chest, abdomen, back, arms, and legs</li> </ul> </li> <li>• Functions of the muscular system <ul style="list-style-type: none"> <li>○ Body movement</li> <li>○ Posture</li> <li>○ Protection</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Muscular System</p>	<p><b>Medium:</b> System <b>Low:</b> Disease/Disorder</p>

<p>c. Integumentary</p> <ul style="list-style-type: none"> <li>• Structures of the integumentary system <ul style="list-style-type: none"> <li>○ Identify integumentary components</li> <li>○ Label the layers of skin</li> </ul> </li> <li>• Functions of the integumentary system <ul style="list-style-type: none"> <li>○ Vitamin D production</li> <li>○ Sensory organ</li> <li>○ Infection protection</li> <li>○ Temperature regulation</li> <li>○ UV light protection</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Integumentary System</p>	<p><b>High:</b> System <b>Medium/High:</b> Disease/Disorder</p>
<p>d. Cardiovascular</p> <ul style="list-style-type: none"> <li>• Structures of the cardiovascular system <ul style="list-style-type: none"> <li>○ Identify cardiovascular organs</li> <li>○ Label the parts of the heart</li> <li>○ Distinguish blood components</li> </ul> </li> <li>• Functions of the cardiovascular system <ul style="list-style-type: none"> <li>○ Blood flow through the heart and body</li> <li>○ Transports nutrients, waste, antibodies, hormones, and gases</li> <li>○ Cardiac conduction system</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Cardiovascular System</p>	<p><b>High:</b> System <b>Low:</b> Disease Disorder</p>
<p>e. Lymphatic / Immune</p> <ul style="list-style-type: none"> <li>• Structures of the lymphatic system <ul style="list-style-type: none"> <li>○ Identify lymphatic organs</li> </ul> </li> <li>• Functions of the lymphatic system <ul style="list-style-type: none"> <li>○ Provide protection against disease</li> <li>○ Movement of lymph fluid</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Lymphatic System</p>	<p><b>High:</b> Disease/Disorder <b>Medium/High:</b> System</p>
<p>f. Respiratory</p> <ul style="list-style-type: none"> <li>• Structures of the respiratory system <ul style="list-style-type: none"> <li>○ Identify respiratory organs</li> </ul> </li> <li>• Functions of the respiratory system <ul style="list-style-type: none"> <li>○ Gas exchange</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Respiratory System</p>	<p><b>High</b></p>

<p>g. Nervous</p> <ul style="list-style-type: none"> <li>• Structures of the nervous system <ul style="list-style-type: none"> <li>○ Identify organs of the nervous system</li> <li>○ Identify structures of the special sense organs</li> </ul> </li> <li>• Functions of the nervous system <ul style="list-style-type: none"> <li>○ Sensation</li> <li>○ Movement</li> <li>○ Processing</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Nervous System</p>	<p><b>Medium:</b> System <b>Medium:</b> Disease/Disorder</p>
<p>h. Endocrine</p> <ul style="list-style-type: none"> <li>• Structures of the endocrine system <ul style="list-style-type: none"> <li>○ Identify endocrine glands</li> </ul> </li> <li>• Functions of the endocrine system <ul style="list-style-type: none"> <li>○ Production of hormones</li> <li>○ Regulation of body processes</li> <li>○ Controls metabolism</li> <li>○ Regulates growth, development, and maturation</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Endocrine System</p>	<p><b>High</b></p>
<p>i. Digestive</p> <ul style="list-style-type: none"> <li>• Structures of the digestive system <ul style="list-style-type: none"> <li>○ Identify digestive organs in sequence</li> <li>○ Differentiate between alimentary and accessory organs</li> </ul> </li> <li>• Functions of the digestive system <ul style="list-style-type: none"> <li>○ Chemical and mechanical digestion</li> <li>○ Absorption of nutrients</li> <li>○ Excretion of waste</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Digestive System</p>	<p><b>High:</b> Disease/Disorder <b>High:</b> System</p>
<p>j. Urinary</p> <ul style="list-style-type: none"> <li>• Structures of the urinary system <ul style="list-style-type: none"> <li>○ Identify urinary organs</li> <li>○ Identify gross and microscopic anatomy of the kidney</li> </ul> </li> <li>• Functions of the urinary system <ul style="list-style-type: none"> <li>○ Process of urine formation</li> <li>○ Urine composition</li> <li>○ Homeostatic balance</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Urinary System</p>	<p><b>High</b></p>



<p>k. Reproductive</p> <ul style="list-style-type: none"> <li>• Structures of the reproductive system <ul style="list-style-type: none"> <li>○ Identify female reproductive organs</li> <li>○ Identify male reproductive organs</li> </ul> </li> <li>• Functions of the reproductive system <ul style="list-style-type: none"> <li>○ Formation of gametes</li> <li>○ Production of hormones</li> </ul> </li> </ul>	<p><b>Module:</b> Anatomy and Physiology Unit: Reproductive System</p>	<p><b>Male System – High</b> <b>Female System – High</b> <b>Disease/Disorder – Medium</b></p>
<p><b>1.2 Diseases and Disorders</b></p>		
<p>1.2.1 Describe etiology, pathology, diagnosis, treatment, and prevention of common diseases and disorders, including, but not limited to the following:</p> <ul style="list-style-type: none"> <li>• Arthritis</li> <li>• Asthma</li> <li>• Cancer</li> <li>• Cataracts</li> <li>• Concussion / Traumatic Brain Injury (TBI)</li> <li>• Cystic fibrosis</li> <li>• Diabetes mellitus</li> <li>• Dementia</li> <li>• Gastric ulcer</li> <li>• Hepatitis</li> <li>• Hypertension</li> <li>• Melanoma</li> <li>• Muscular Dystrophy</li> <li>• Myocardial Infarction</li> <li>• Sexually Transmitted Infection (STI)</li> <li>• Stroke / Cardiovascular Accident (CVA)</li> <li>• Tuberculosis</li> <li>• Urinary Tract Infection (UTI)</li> </ul>	<p><b>Module:</b> Diseases and Disorders Unit: Introduction Unit: Asthma Unit: Diabetes</p> <p><b>Module:</b> Bloodborne Pathogens</p> <p><b>Module:</b> Safety Precautions</p>	<p><b>High</b> (Except Prevention)</p>

1.2.2 Describe biomedical therapies as they relate to the prevention, pathology, and treatment of disease. <ul style="list-style-type: none"> <li>• Gene testing</li> <li>• Gene therapy</li> <li>• Cloning</li> <li>• Stem cell research</li> </ul>	<b>Not Covered</b>	<b>Not Covered</b>
<b>1.3 Medical Math</b>		
1.3.1 Demonstrate competency in basic math skills and mathematical conversions as they relate to healthcare.		
a. Metric system <ul style="list-style-type: none"> <li>• Kilo-</li> <li>• Centi-</li> <li>• Deci-</li> <li>• Milli-</li> <li>• Micro-</li> </ul>	<b>Module:</b> Medical Mathematics <b>Unit:</b> Measurement Systems	<b>Medium</b>
b. Mathematical <ul style="list-style-type: none"> <li>• Average</li> <li>• Ratios</li> <li>• Fractions</li> <li>• Percentages</li> <li>• Addition / Subtraction</li> <li>• Multiplication / Division</li> </ul>	<b>Module:</b> Medical Mathematics <b>Unit:</b> Key Calculations	<b>Medium</b>
c. Conversions <ul style="list-style-type: none"> <li>• Height (inches/meters)</li> <li>• Weight/mass (pounds/grams)</li> <li>• Length (inches/meters)</li> <li>• Volume (ml/cc)</li> <li>• Temperature (F/C)</li> <li>• Household measurements (Tbsp/tsp/cup/oz)</li> </ul>	<b>Module:</b> Medical Mathematics <b>Unit:</b> Key Calculations	<b>High:</b> English System, Conversions, Labels & Prescriptions, Dosages, Parenteral Medication, Time/Temperature <b>Medium:</b> Metrics System <b>Low:</b> Apothecary System
1.3.2 Demonstrate the ability to analyze diagrams, charts, graphs, and tables to interpret healthcare results.	<b>Module:</b> Medical Mathematics <b>Unit:</b> Charts and Graphs	<b>High</b>
1.3.3 Demonstrate use of the 24-hour clock/military time.	<b>Module:</b> Medical Mathematics <b>Unit:</b> Time & Temperature	<b>Medium</b>

Foundation Standard 2: Communication	HealthCenter21 Location	HealthCenter21 Coverage
<i>Demonstrate methods of delivering and obtaining information, while communicating effectively.</i>		
<b>2.1 Concepts of Effective Communication</b>		
2.1.1 Model verbal and nonverbal communication. <ul style="list-style-type: none"> <li>• Active listening</li> <li>• Silence</li> <li>• Summarizing</li> <li>• Reflecting</li> </ul>	<b>Module:</b> Communications Unit: Basic Communication  <b>Module:</b> Personal Qualities Unit: Personal Characteristics	<b>High</b>
2.1.2 Identify common barriers to communication. <ul style="list-style-type: none"> <li>a. Physical disabilities               <ul style="list-style-type: none"> <li>• Aphasia</li> <li>• Hearing loss</li> <li>• Impaired vision</li> <li>• Developmental level</li> </ul> </li> <li>b. Psychological barriers               <ul style="list-style-type: none"> <li>• Attitudes</li> <li>• Bias</li> <li>• Prejudice</li> <li>• Stereotyping</li> </ul> </li> </ul>	<b>Module:</b> Communications	<b>High</b>
2.1.3 Distinguish between subjective and objective information.	<b>Module:</b> Communications Unit: Documentation	<b>High</b>
2.1.4 Interpret elements of communication using basic sender-receiver-message-feedback model.	<b>Module:</b> Communications Unit: Basic Communication	<b>High</b>
2.1.5 Modify communication to meet the needs of the patient/client and be appropriate to the situation.	<b>Module:</b> Communications Unit: Interpersonal Communication	<b>Medium</b>
2.1.6 Describe appropriate interactions with patients throughout various stages of psychosocial development.	<b>Not covered</b>	<b>Not covered</b>

<b>2.2 Medical Terminology</b>		
2.2.1 Use common roots, prefixes, and suffixes to communicate information.	<b>Module:</b> Medical Terminology	<b>High</b> (Except roots)
2.2.2 Interpret medical abbreviations to communicate information.	<b>Module:</b> Medical Terminology Unit: Abbreviations	<b>High</b>
<b>2.3 Written Communication Skills</b>		
2.3.1 Utilize proper elements of written and electronic communication (spelling, grammar, and formatting).	<b>Module:</b> Communications Unit: Documentation	<b>Medium</b>
2.3.2 Prepare examples of technical and informative writing.	<b>Module:</b> Communications Unit: Documentation	<b>Medium</b>
2.3.3 Demonstrate appropriate use of digital communication in a work environment, such as email, text, and social media.	<b>Not covered</b>	<b>Not covered</b>

<b>Foundation Standard 3: Systems</b>	<b>HealthCenter21 Location</b>	<b>HealthCenter21 Coverage</b>
<i>Identify how key systems affect services performed and quality of care.</i>		
<b>3.1 Healthcare Delivery Systems</b>		
3.1.1 Differentiate healthcare delivery systems and healthcare related agencies.		
a. Types of practice settings <ul style="list-style-type: none"> <li>• Acute care</li> <li>• Ambulatory care</li> <li>• Behavioral and mental health services</li> <li>• Home care</li> <li>• Long-term care</li> <li>• Medical and dental practices</li> </ul>	<b>Module:</b> Healthcare Systems Unit: Healthcare Delivery Systems  <b>Module:</b> Behavioral Health Unit: Managing Behavioral Health	<b>High</b>

<p>b. Specialty medical and dental practices</p> <ul style="list-style-type: none"> <li>• Cosmetic surgery</li> <li>• Pulmonology</li> <li>• Surgical</li> <li>• Orthodontics</li> </ul>	<p><b>Not Covered</b></p>	<p><b>Not Covered</b></p>
<p>c. Government</p> <ul style="list-style-type: none"> <li>• Veterans Administration (VA)</li> <li>• Centers for Disease Control and Prevention (CDC)</li> <li>• Food and Drug Administration (FDA)</li> <li>• Occupational Safety and Health Administration (OSHA)</li> <li>• Public Health Service (PHS)</li> </ul>	<p><b>Module:</b> Healthcare Systems Unit: Healthcare Delivery Systems</p>	<p><b>High</b></p>
<p>d. Related organizations</p> <ul style="list-style-type: none"> <li>• American Cancer Society</li> <li>• American Heart Association (AHA)</li> <li>• American Red Cross (ARC)</li> <li>• March of Dimes</li> <li>• World Health Organization (WHO)</li> </ul>	<p><b>Module:</b> Healthcare Systems Unit: Healthcare Delivery Systems <b>Module:</b> CPR and Basic Life Support Unit: Introduction</p>	<p><b>High</b></p>
<p>3.1.2 Examine the healthcare consumer's rights and responsibilities within the healthcare system.</p> <ul style="list-style-type: none"> <li>• Self-advocacy</li> <li>• Compliance</li> <li>• Patient's Bill of Rights</li> </ul>	<p><b>Module:</b> Healthcare Systems Unit: Trends, Technology, and Emerging Issues</p>	<p><b>High</b></p>
<p>3.1.3 Analyze the impact of emerging issues on healthcare delivery systems.</p> <ul style="list-style-type: none"> <li>• Addictions</li> <li>• Bioethics</li> <li>• Epidemiology</li> <li>• Socioeconomics</li> <li>• Technology</li> </ul>	<p><b>Module:</b> Healthcare Systems</p>	<p><b>High</b></p>
<p>3.1.4 Analyze healthcare economics and related terms.</p>		
<p>a. The history and role of health insurance and employer/employee benefits</p>	<p><b>Module:</b> Healthcare Systems</p>	<p><b>High</b></p>

<p>b. Fundamental terms related to health insurance</p> <ul style="list-style-type: none"> <li>• Claim</li> <li>• Coinsurance</li> <li>• Co-payment</li> <li>• Fraud</li> <li>• HIPAA</li> <li>• Premium</li> </ul>	<p><b>Module:</b> Healthcare Systems Unit: Health Insurance</p>	<p><b>High</b></p>
<p>c. Types of insurance plans</p> <ul style="list-style-type: none"> <li>• Private health insurance plans</li> <li>• Managed Care <ul style="list-style-type: none"> <li>○ Health Maintenance Organization (HMO)</li> <li>○ Independent Practice Association (IPA)</li> <li>○ Preferred Provider Organization (PPO)</li> </ul> </li> <li>• Government programs <ul style="list-style-type: none"> <li>○ Affordable Care Act (ACA)</li> <li>○ Medicaid</li> <li>○ Medicare</li> <li>○ Tricare</li> <li>○ Workers' Compensation</li> </ul> </li> </ul>	<p><b>Module:</b> Healthcare Systems Unit: Health Insurance</p> <p><b>Module:</b> Insurance and Coding Unit: Insurance</p> <p><b>Module:</b> Insurance and Coding Unit: Government Programs</p>	<p><b>High</b></p>

Foundation Standard 4: Employability Skills	HealthCenter21 Location	HealthCenter21 Coverage
<i>Use employability skills to enhance employment opportunities and job satisfaction.</i>		
<b>4.1 Personal Traits of the Health Professional</b>		
4.1.1 Identify personal traits and attitudes desirable in a member of the career ready healthcare team <ul style="list-style-type: none"> <li>• Acceptance of criticism</li> <li>• Competence</li> <li>• Dependability</li> <li>• Discretion</li> <li>• Empathy</li> <li>• Enthusiasm</li> <li>• Honesty</li> <li>• Initiative</li> <li>• Integrity</li> <li>• Patience</li> <li>• Positive Attitude</li> <li>• Responsibility</li> <li>• Self-motivation</li> <li>• Tact</li> <li>• Team player</li> <li>• Willingness to learn</li> </ul>	<b>Module:</b> Personal Qualities <b>Unit:</b> Personal Characteristics	<b>High</b>
4.1.2 Summarize professional standards as they apply to hygiene, dress, language, confidentiality, and behavior.	<b>Module:</b> Personal Qualities <b>Unit:</b> Personal Characteristics	<b>High</b>

## 4.2 Employability Skills

4.2.1 Apply employability skills in healthcare.

- Chain of command
- Communication Skills
- Decision making
- Flexible
- Organization
- Problem Solving
- Scope of practice
- Time Management
- Work Ethic

**Module:** Personal Qualities  
Unit: Personal Characteristics

**Module:** Legal and Ethical Responsibilities  
Unit: Scope of Practice

**Module:** Healthcare Systems  
Unit: Organizational Structure

**High**

## 4.3 Career Decision-making

4.3.1 Research levels of education, credentialing requirements, and employment trends in health professions.

**Module:** Health Career Exploration  
Unit: Introduction to Career Exploration

**Module:** Health Care Careers

**High**

4.3.2 Distinguish differences among careers within health science pathways Biotechnology research and development

- Diagnostic services
- Health informatics
- Support services
- Therapeutic services

**Module:** Health Career Exploration  
Unit: Introduction to Health Care Careers

**High**



## 4.4 Employability Preparation

### 4.4.1 Develop components of a personal portfolio.

- Letter of introduction
- Resume
- Sample Projects
- Writing Sample
- Work-based Learning Documentation
- Oral Report
- Community Service / Service Learning
- Credentials
- Technology Skills
- Leadership Examples

**Module:** Job Seeking Skills

**Low**

### 4.4.2 Identify strategies for pursuing employment

- Social media
- Personal networking
- Employer websites
- Internships

**Module:** Job Seeking Skills

**High**

Foundation Standard 5 Legal Responsibilities	HealthCenter21 Location	HealthCenter21 Coverage
<i>Describe legal responsibilities, limitations, and implications on healthcare worker actions.</i>		
<b>5.1 Legal Responsibilities and Implications</b>		
5.1.1 Analyze legal responsibilities and implications of criminal and civil law. <ul style="list-style-type: none"> <li>• Abuse</li> <li>• Assault</li> <li>• Battery</li> <li>• Invasion of privacy</li> <li>• Libel</li> <li>• Malpractice</li> <li>• Negligence</li> <li>• Slander</li> </ul>	<b>Module:</b> Legal and Ethical Responsibilities  <b>Module:</b> Safety Precautions	<b>High</b>
<b>5.2 Legal Practices</b>		
5.2.1 Apply standards for the safety, privacy, and confidentiality of health information <ul style="list-style-type: none"> <li>• HIPAA</li> <li>• Privileged communication</li> </ul>	<b>Module:</b> Legal and Ethical Responsibilities Unit: Privacy and Security	<b>High</b>
5.2.2 Describe advance directives.	<b>Module:</b> Legal and Ethical Responsibilities Unit: Advance Directives and Client Rights	<b>High</b>
5.2.3 Summarize the essential characteristics of a patient’s basic rights within a healthcare setting.	<b>Module:</b> Legal and Ethical Responsibilities Unit: Advance Directives and Client Rights	<b>High</b>
5.2.4 Differentiate informed and implied consent.	<b>Module:</b> Legal and Ethical Responsibilities Unit: Civil and Criminal Law	<b>High</b>
5.2.5 Explain laws governing harassment.	<b>Module:</b> Legal and Ethical Responsibilities Unit: Civil and Criminal Law	<b>High</b>
5.2.6 Describe the concept of scope of practice.	<b>Module:</b> Legal and Ethical Responsibilities Unit: Civil and Criminal Law	<b>High</b>
5.2.7 Utilize procedures for reporting activities and behaviors that affect the health, safety, and welfare of others (incident report).	<b>Module:</b> Legal and Ethical Responsibilities Unit: Liability and Ethics	<b>High</b>

Foundation Standard 6: Ethics	HealthCenter21 Location	HealthCenter21 Coverage
<i>Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment.</i>		
<b>6.1 Ethical Practice</b>		
6.1.1 Differentiate between ethical and legal issues impacting healthcare.	<b>Module:</b> Legal and Ethical Responsibilities Unit: Liability and Ethics	<b>High</b>
6.1.2 Identify ethical issues and their implications related to healthcare. <ul style="list-style-type: none"> <li>• Ethics committee</li> <li>• Euthanasia</li> <li>• In vitro fertilization</li> <li>• Organ donation</li> <li>• Scope of practice</li> </ul>	<b>Module:</b> Legal and Ethical Responsibilities Unit: Liability and Ethics	<b>High</b>
<b>6.2 Cultural, Social, and Ethnic Diversity</b>		
6.2.1 Discuss religious and cultural values as they impact healthcare <ul style="list-style-type: none"> <li>• Ethnicity</li> <li>• Gender</li> <li>• Race</li> <li>• Religion</li> </ul>	<b>Module:</b> Cultural, Social, and Ethnic Diversity  <b>Module:</b> Wellness and Nutrition	<b>High</b>
6.22 Demonstrate respectful and empathetic treatment of ALL patients/clients <ul style="list-style-type: none"> <li>• Civility</li> <li>• Customer service</li> <li>• Patient satisfaction</li> </ul>	<b>Module:</b> Cultural, Social, and Ethnic Diversity  <b>Module:</b> Customer Service	<b>High</b>

Foundation Standard 7: Safety	HealthCenter21 Location	HealthCenter21 Coverage
<i>Identify existing and potential hazards to clients, co-workers, and self. Employ safe work practices and follow health and safety policies and procedures to prevent injury and illness.</i>		
<b>7.1 Infection Control</b>		
7.1.1 Explain principles of infection transmission.		
a. Identify classifications of pathogens <ul style="list-style-type: none"> <li>• Bacteria</li> <li>• Fungi</li> <li>• Parasites</li> <li>• Protozoa</li> <li>• Viruses</li> </ul>	<b>Module:</b> Infection Control Unit: Introduction to Infection Control	<b>High</b>
b. Describe characteristics of microorganisms <ul style="list-style-type: none"> <li>• Aerobic</li> <li>• Anaerobic</li> <li>• Non-pathogenic</li> <li>• Pathogenic</li> </ul>	<b>Module:</b> Infection Control Unit: Introduction to Infection Control	<b>Medium</b> (aerobic, anaerobic not mentioned)
c. Recognize chain of infection	<b>Module:</b> Infection Control Unit: Introduction to Infection Control <b>Module:</b> Bloodborne Pathogens Unit: HIV, AIDS, and Hepatitis	<b>High</b>
d. Recognize mode of transmission <ul style="list-style-type: none"> <li>• Common vehicle (air, food, water)</li> <li>• Direct</li> <li>• Healthcare-associated infections (nosocomial)</li> <li>• Indirect</li> <li>• Opportunistic</li> <li>• Vectors</li> </ul>	<b>Module:</b> Bloodborne Pathogens Unit: HIV, AIDS, and Hepatitis <b>Module:</b> Infection Control Unit: Introduction to Infection Control	<b>High</b>
7.1.2 Differentiate methods of controlling the spread and growth of microorganisms.	<b>Module:</b> Infection Control <b>Module:</b> Safety Precautions	<b>High</b>

<p>a. Asepsis</p> <ul style="list-style-type: none"> <li>• Sanitization</li> <li>• Antisepsis</li> <li>• Disinfection</li> <li>• Sterile technique</li> <li>• Sterilization</li> </ul>	<p><b>Module:</b> Infection Control</p>	<p><b>High:</b> Infection Control <b>Medium:</b> Cleansing Equipment &amp; Sterile Gloves</p>
<p>b. Standard precautions</p> <ul style="list-style-type: none"> <li>• Handwashing</li> <li>• Gloving</li> <li>• Personal Protective Equipment (PPE)</li> <li>• Environmental cleaning</li> </ul>	<p><b>Module:</b> Infection Control <b>Module:</b> Bloodborne Pathogens</p>	<p><b>High</b></p>
<p>c. Isolation precautions</p> <ul style="list-style-type: none"> <li>• Transmission-based cleaning</li> </ul>	<p><b>Module:</b> Infection Control Unit: Transmission-Based Precautions</p>	<p><b>High</b></p>
<p>d. Bloodborne pathogen precautions</p>	<p><b>Module:</b> Bloodborne Pathogens</p>	<p><b>High</b></p>
<p>e. Vaccinations</p>	<p><b>Module:</b> Bloodborne Pathogens Unit: Bloodborne Pathogens Standard</p>	<p><b>Medium</b></p>
<p><b>7.2 Personal Safety</b></p>		
<p>7.2.1 Apply personal safety procedures based on Occupational Safety and Health Administration (OSHA) and Centers for Disease Control (CDC) regulations.</p>	<p><b>Module:</b> Legal and Ethical Responsibilities <b>Module:</b> Bloodborne Pathogens</p>	<p><b>High</b></p>
<p>7.2.2 Demonstrate principles of body mechanics during patient care.</p> <ul style="list-style-type: none"> <li>• Ambulating</li> <li>• Lifting</li> <li>• Positioning</li> </ul>	<p><b>Module:</b> Safety Precautions</p>	<p><b>High</b></p>
<p>7.2.3 Demonstrate and apply the use of personal protective equipment (PPE).</p>	<p><b>Module:</b> Infection Control</p>	<p><b>High</b></p>
<p><b>7.3 Environmental Safety</b></p>		
<p>7.3.1 Apply safety techniques in the work environment</p> <ul style="list-style-type: none"> <li>• Ergonomics</li> <li>• Safe operation of equipment</li> <li>• Patient/client/employee safety measures</li> </ul>	<p><b>Module:</b> Safety Precautions</p>	<p><b>High</b> (Missing: Safe operation of equipment)</p>

<b>7.4 Common Safety Hazards</b>		
7.4.1 Observe all safety standards related to the Occupational Exposure to Hazardous Chemicals Standard (Safety Data Sheets (SDSs)).	<b>Module:</b> Safety Precautions Unit: Environmental Safety	<b>High</b>
7.4.2 Comply with safety signs, symbols, and labels.	<b>Module:</b> Safety Precautions Unit: Safety Guidelines and Regulations	<b>High</b>
<b>7.5 Emergency Procedures and Protocols</b>		
7.5.1 Practice fire safety in a healthcare setting.	<b>Module:</b> Safety Precautions Unit: Environmental Safety	<b>High</b>
7.5.2 Apply principles of basic emergency response in natural disasters and other emergencies (safe location, contact emergency personnel, follow facility protocols).	<b>Module:</b> Safety Precautions Unit: Environmental Safety	<b>High</b>

<b>Foundation Standard 8: Teamwork</b>	<b>HealthCenter21 Location</b>	<b>HealthCenter21 Coverage</b>
<b>8.1 Healthcare Teams</b>		
8.1.1 Evaluate roles and responsibilities of team members.	<b>Module:</b> Personal Qualities Unit: Health Care Team	<b>High</b>
8.1.2 Identify characteristics of effective teams. <ul style="list-style-type: none"> <li>• Defined roles</li> <li>• Common purpose</li> <li>• Effective communication</li> <li>• Effective leadership</li> <li>• Measurable processes and outcomes</li> <li>• Mutual respect</li> <li>• Shared goals</li> </ul>	<b>Module:</b> Communications <b>Module:</b> Personal Qualities Unit: Health Care Team	<b>High</b>
<b>8.2 Team Member Participation</b>		
8.2.1 Recognize methods for building positive team relationships.	<b>Module:</b> Personal Qualities Unit: Health Care Team	<b>Medium</b>

<p>8.2.2 Analyze attributes and attitudes of an effective leader.</p> <p>a. Characteristics</p> <ul style="list-style-type: none"> <li>• Focused and driven</li> <li>• Interpersonal skills</li> <li>• Motivates and inspires</li> <li>• Organized and balanced</li> </ul> <p>b. Types</p> <ul style="list-style-type: none"> <li>• Autocratic</li> <li>• Democratic</li> <li>• Laissez faire</li> </ul> <p>c. Roles</p> <ul style="list-style-type: none"> <li>• Communicates vision</li> <li>• Leads change</li> <li>• Manages accountability</li> </ul>	<p><b>Module:</b> Personal Qualities Unit: Health Care Team</p> <p><b>Module:</b> Professionalism Unit: Personal Management Skills</p>	<p><b>High</b></p>
<p>8.2.3 Apply effective techniques for managing team conflict.</p> <ul style="list-style-type: none"> <li>• Communicate assertively</li> <li>• Set clear expectations</li> <li>• Gather the facts</li> <li>• Mediate disputes</li> <li>• Negotiate resolutions</li> </ul>	<p><b>Module:</b> Personal Qualities Unit: Health Care Team</p>	<p><b>High</b></p>
<p>8.2.4 Evaluate why teamwork is an important part of healthcare and how it improves patient care.</p>	<p><b>Module:</b> Personal Qualities Unit: Health Care Team</p>	<p><b>Medium</b></p>

Foundation Standard 9: Health Maintenance Practices	HealthCenter21 Location	HealthCenter21 Coverage
<i>Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors.</i>		
<b>9.1 Healthy Behaviors</b>		
9.1.1 Promote behaviors of health and wellness. <ul style="list-style-type: none"> <li>• Exercise</li> <li>• Nutrition</li> <li>• Relationships</li> <li>• Sleep habits</li> <li>• Stress management</li> <li>• Weight control</li> </ul>	<b>Module:</b> Personal Qualities  <b>Module:</b> Wellness and Nutrition	<b>High</b>
9.1.2 Examine various aspects of behavioral health. <ul style="list-style-type: none"> <li>• Anxiety</li> <li>• Depression</li> <li>• Substance abuse</li> <li>• Suicide</li> </ul>	<b>Module:</b> Healthcare Systems Unit: Healthcare Delivery Systems  <b>Module:</b> Behavioral Health Unit: all units	<b>Medium</b>
9.1.3 Describe strategies for prevention of disease. <ul style="list-style-type: none"> <li>• Community health education outreach programs</li> <li>• Immunizations</li> <li>• Medical, dental, and mental health screenings</li> <li>• Routine physical exams</li> <li>• Stress management</li> </ul>	<b>Module:</b> Wellness and Nutrition Unit: Health Care Unit: Stress and Planning for Wellness  <b>Module:</b> Client Status Unit: Vital Signs and Body Measurements  <b>Module:</b> The Health Assistant Unit: Health Assisting  <b>Module:</b> Human Growth and Development Unit: Childhood	<b>High</b>  <b>Not covered:</b> Medical, dental, and mental health screenings



<p>9.13 Investigate complementary and alternative health practices as they relate to wellness and disease prevention.</p> <ul style="list-style-type: none"> <li>• Acupuncture</li> <li>• Eastern medicine</li> <li>• Holistic medicine</li> <li>• Homeopathy</li> <li>• Manipulative therapies</li> <li>• Natural therapies</li> </ul>	<p><b>Module:</b> Wellness and Nutrition <b>Unit:</b> Wellness</p>	<p><b>High</b></p>
<p><b>9.2 Healthcare Across the Lifespan</b></p>		
<p>9.2.1 Discuss physical, mental, social and behavioral development and its impact on healthcare.</p>	<p><b>Not covered</b></p>	<p><b>Not covered</b></p>

<p><b>Foundation Standard 10: Technical Skills*</b></p> <p><i>*Additional technical skills may be included in a program of study based on career specialties.</i></p>	<p><b>HealthCenter21 Location</b></p>	<p><b>HealthCenter21 Coverage</b></p>
<p><i>Apply and demonstrate technical skills and knowledge common to health career specialties.</i></p>		
<p><b>10.1 Technical Skills</b></p>		
<p>10.1.1 Demonstrate procedures for measuring and recording vital signs including the normal ranges.</p> <ul style="list-style-type: none"> <li>• Blood pressure</li> <li>• Temperature</li> <li>• Oxygen saturation</li> <li>• Pain</li> <li>• Pulse</li> <li>• Respirations</li> </ul>	<p><b>Module:</b> Client Status</p>	<p><b>High</b></p>
<p>10.1.2 Obtain training or certification in</p> <ul style="list-style-type: none"> <li>• Automated external defibrillator (AED)</li> <li>• Cardiopulmonary resuscitation (CPR)</li> <li>• First aid</li> <li>• Foreign body airway obstruction (FBAO)</li> </ul>	<p><b>Module:</b> CPR and Basic Life Support <b>Module:</b> Emergency Care</p>	<p><b>High:</b> Adult <b>Medium:</b> Pediatric</p>

Foundation Standard 11: Information Technology in Healthcare	HealthCenter21 Location	HealthCenter21 Coverage
<i>Apply information technology practices common across health professions.</i>		
<b>11.1 Key Principles of Health Information Systems</b>		
11.1.1 Identify components of an electronic health record (EHR) and/or electronic medical record (EMR). <ul style="list-style-type: none"> <li>• Diagnostic tests</li> <li>• History and physical</li> <li>• Medications</li> <li>• Patient demographics</li> <li>• Progress notes</li> <li>• Treatment Plan</li> </ul>	<b>Module:</b> Legal and Ethical Responsibilities Unit: Privacy and Security  <b>Module:</b> Health Information Technology  <b>Module:</b> EHR Simulation	<b>High</b>
11.1.2 Explore different types of health data collection tools. <ul style="list-style-type: none"> <li>• Medical wearable devices</li> <li>• Patient monitoring equipment</li> <li>• Phone application</li> <li>• Telemedicine/telehealth</li> </ul>	<b>Module:</b> Health Information Technology Unit: Electronic Health Records	<b>High</b>
11.1.3 Create electronic documentation that reflects timeliness, completeness, and accuracy.	<b>Module:</b> Health Information Technology Unit: Electronic Health Records <b>Module:</b> EHR Simulation	<b>High</b>
11.1.4 Adhere to information systems policies, procedures, and regulations as required by national, state, and local entities.	<b>Module:</b> Legal and Ethical Responsibilities Unit: Privacy and Security	<b>High</b>