

## Introduction

*The purpose of providing the four-course health science curriculum framework is to demonstrate how to efficiently and effectively teach a health science program in its entirety while also providing a clear path enabling the student flexibility in choosing a health science program of two versus four semesters. The health science curriculum framework is based on the National Health Science Standards NHSS. The first two courses, Foundations of Healthcare Professions and Essential Healthcare Practices are introductory health science courses with service learning projects consisting of basic skills conducting vision screenings, vital signs and blood pressures in various facilities such as schools and nursing homes. Courses Human Structure, Function, and Disease (A) and Human Structure, Function, and Disease (B) dive in depth into anatomy and physiology while applying coursework into real world work-based opportunities, such as internships and apprenticeships in health clinics, hospitals, nursing homes, etc. It is during these courses that health science programs focus on a specific healthcare pathway(s) such as nurse aide, mental health worker, sports medicine, pharmacy technician, etc. This four-course curriculum framework serves as an example of various possibilities for secondary health science programs to help facilitate development of health science programs. These courses may be delivered in order, in a different order or independently.*

### Title: **Essential Healthcare Practices**

**Course Description:** Builds on curriculum introduced in Foundations of Healthcare Professions. Develops enhanced written and oral communication skills and medical math principles. Introduces basic medical terminology roots, prefixes and suffixes to communicate body systems, diseases and disorders. Identifies how key systems affect services performed and quality of care. Defines legal responsibilities, limitations, and implications on healthcare worker actions. Investigates accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment. Instructs technical skills for measuring and recording vital signs.

**Curricular Activities:** HOSA–Future Health Professionals, Service Learning Projects

**NCHSE Resources:** Health Science Curriculum Enhancement and Work-based Learning; NCHSE End of Course (EOC) Assessments: Health Science Fundamentals, Nurse Assistant, Medical Assistant, etc.

### **1.0 Communication**

**(Based on National Health Science Standards 2.1.3, 2.3.1, 2.3.2, 2.3.3)**

Demonstrate methods of delivering and obtaining information, while communicating effectively.

- 1.1 Concepts of Effective Communication
  - 1.1.1 Distinguish between subjective and objective information.
- 1.2 Written Communication Skills
  - 1.3.1 Use proper elements of written and electronic communication (spelling, grammar, and formatting).
  - 1.3.2 Prepare examples of technical and informative writing.
  - 1.3.3 Demonstrate appropriate use of digital communication in a work environment, such as email, text, and social media.
- 1.3 Medical Terminology
  - 1.3.1 Use common roots, prefixes, and suffixes to communicate information.
  - 1.3.2 Interpret common medical abbreviations to communicate information.

## **2.0 Human Anatomy and Physiology**

**(Based on National Health Science Standards 1.1.1 b, c, d)**

Understand human anatomy, physiology, common diseases and disorders, and medical math principles.

2.1 Describe the organization of the human body and directional terms.

2.1.1 Demonstrate anatomical position

2.1.2 Identify body planes

- Sagittal
- Midsagittal
- Coronal / Frontal
- Transverse / Horizontal

2.1.3 Use directional terms

- Anterior / Posterior
- Medial / Lateral
- Proximal / Distal
- Superficial / Deep
- Superior / Inferior
- Ventral / Dorsal

## **3.0 Systems**

**(Based on National Health Science Standards – 6.1.1, 6.1.2, 6.2.1, 6.2.2, 3.1.1, 3.1.2, 3.1.3, 3.1.4)**

Identify how key systems affect services performed and quality of care.

3.1 Healthcare Delivery Systems

3.1.1 Differentiate healthcare delivery systems and healthcare related agencies.

3.1.1.1 Types of practice settings

- Acute care
- Ambulatory care
- Behavioral and mental health services
- Home care
- Long-term care
- Medical and dental practices

3.1.2 Specialty medical and dental practices

- Cosmetic surgery
- Pulmonology
- Surgical
- Orthodontics

3.1.2 Government

- Veterans Administration (VA)
- Centers for Disease Control and Prevention (CDC)
- Food and Drug Administration (FDA)
- Occupational Safety and Health Administration (OSHA)
- Public Health Service (PHS)

3.1.3 Related organizations

- American Cancer Society
- American Heart Association (AHA)
- American Red Cross (ARC)

- March of Dimes
- World Health Organization (WHO)
- 3.2 Examine the healthcare consumer's rights and responsibilities within the healthcare system.
  - Self-advocacy
  - Compliance
  - Patient's Bill of Rights
- 3.3 Analyze the impact of emerging issues on healthcare delivery systems.
  - Addictions
  - Bioethics
  - Epidemiology
  - Socioeconomics
  - Technology
- 3.4 Analyze healthcare economics and related terms.
  - 3.4.1 The history and role of health insurance and employer/employee benefits;
  - 3.4.2 Fundamental terms related to health insurance
    - Claim
    - Coinsurance
    - Co-payment
    - Fraud
    - HIPAA
    - Premium
  - 3.4.3 Types of insurance plans
    - Private health insurance plans
    - Managed Care
      - Health Maintenance Organization (HMO)
      - Independent Practice Association (IPA)
      - Preferred Provider Organization (PPO)
    - Government programs
      - Affordable Care Act (ACA)
      - Medicaid
      - Medicare
      - Tricare
      - Workers' Compensation

#### **4.0 Legal Responsibilities**

**(Based on National Health Science Standards 5.1.1, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7)**

Describe legal responsibilities, limitations, and implications on healthcare worker actions.

##### 4.1 Legal Responsibilities and Implications

- 4.1.1 Analyze legal responsibilities and implications of criminal and civil law.
  - Abuse
  - Assault
  - Battery
  - Invasion of privacy
  - Libel

- Malpractice
- Negligence
- Slander

#### 4.2 Legal Practices

- 4.2.1 Apply standards for the safety, privacy and confidentiality of health information.
  - HIPAA
  - Privileged communication
- 4.2.2 Describe advance directives.
- 4.2.3 Summarize the essential characteristics of a patient’s basic rights within a healthcare setting.
- 4.2.4 Differentiate informed and implied consent.
- 4.2.5 Explain laws governing harassment.
- 4.2.6 Describe the concept of scope of practice.
- 4.2.7 Utilize procedures for reporting activities and behaviors that affect the health, safety, and welfare of others (incident report).

### 5.0 Ethics

**(Based on National Health Science Standards 6.1.1, 6.1.2, 6.2.1, 6.2.2)**

Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment.

#### 5.1 Ethical Practice

- 5.1.1 Differentiate between ethical and legal issues impacting healthcare.
- 5.1.2 Identify ethical issues and their implications related to healthcare.
  - Ethics committee
  - Euthanasia
  - In vitro fertilization
  - Organ donation
  - Scope of practice

#### 5.2 Cultural, Social, and Ethnic Diversity

- 5.2.1 Discuss religious and cultural values as they impact healthcare.
  - Ethnicity
  - Gender
  - Race
  - Religion
- 5.2.2 Demonstrate respectful and empathetic treatment of ALL patients/clients.
  - Civility
  - Customer service
  - Patient satisfaction

### 6.0 Medical Mathematics

**(Based on National Health Science Standards 1.3.1, 1.3.2, 1.3.3)**

Understand math principles integral to medical applications.

- 6.1. Demonstrate competency using basic math skills and mathematical conversions as they relate to healthcare.
  - 6.1.1 Metric system
    - Kilo-

- Centi-
- Deci-
- Milli-
- Micro-

#### 6.1.2 Mathematical Operations

- Average
- Ratios
- Fractions
- Percentages
- Addition / Subtraction
- Multiplication / Division

#### 6.1.3 Conversions

- Height (inches/meters)
- Weight/mass (pounds/grams)
- Length (inches/meters)
- Volume (ml/cc)
- Temperature (F/C)
- Household measurements (Tbsp/tsp/cup/oz)

- 6.2 Demonstrate the ability to analyze diagrams, charts, graphs, and tables to interpret healthcare results.
- 6.3 Demonstrate use of the 24-hour clock/military time.

### 7.0 Technical Skills\*

**(Based on National Health Science Standards 10.1.1, 10.1.2)**

Apply and demonstrate technical skills and knowledge common to health career specialties.

- 7.1 Demonstrate procedures for measuring and recording vital signs including the normal ranges.
- Blood pressure
  - Oxygen saturation
  - Pain
  - Pulse
  - Respirations
  - Temperature

*\*Additional technical skills may be included in a program of study based on career specialties.*