

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: **Foundations of Healthcare Professions**

Course Description: Develops professional written and oral communication plans and addresses the foundation standards including health maintenance, employability skills, teamwork and safety practices to ensure effective patient-centered outcomes between healthcare professionals, patients and caregivers.

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

NCHSE Resources: Health Science Curriculum Enhancement and Work-based Learning; NCHSE End of Course (EOC) Assessment Health Science Fundamentals

Certifications: CPR

1.0 Communication

(Based on National Health Science Standards 2.1.1, 2.1.2, 2.1.4, 2.1.5, 2.1.6, 2.2.1)

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

1.1 Concepts of Effective Communication

1.1.1 Model verbal and nonverbal therapeutic communication.

- Active listening
- Silence
- Summarizing
- Reflecting

1.1.2 Identify common barriers to communication.

1.1.2.1 Physical disabilities

- Aphasia
- Hearing loss
- Impaired vision
- Developmental level

1.1.2.2 Psychological barriers

- Attitudes
- Bias
- Prejudice
- Stereotyping

- 1.1.3 Interpret elements of communication using sender-message-receiver feedback model.
- 1.1.4 Modify communication to meet the needs of the patient/client and be appropriate to the situation.
- 1.1.5 Describe appropriate interactions with patients throughout various stages of psychosocial development.
- 1.2 Medical Terminology
- 1.2.1 Interpret common medical abbreviations to communicate information specific to course content.

2.0 Teamwork

(Based on National Health Science Standards – 8.1.1, 8.1.2, 8.2.1, 8.2.2, 8.2.3, 8.2.4)

Identify roles and responsibilities of individual members as part of the healthcare team.

- 2.1 Evaluate roles and responsibilities of healthcare team members.
- 2.2 Identify characteristics of effective teams.

- Defined roles
- Common purpose
- Effective communication
- Effective leadership
- Measurable processes and outcomes
- Mutual respect
- Shared goals

2.3 Team Member Participation

- 2.3.1 Recognize methods for building positive team relationships.
- 2.3.2 Analyze attributes and attitudes of an effective leader.

2.3.2.1 Characteristics

- Focused and driven
- Interpersonal skills
- Motivates and inspires
- Organized and balanced

2.3.2.2 Types

- Autocratic
- Democratic
- Laissez faire

2.3.2.3 Roles

- Communicates vision
- Leads change
- Manages accountability

2.3.4 Apply effective techniques for managing team conflict.

- Communicate assertively
- Set clear expectations
- Gather the facts

- Mediate disputes
 - Negotiate resolutions
- 2.3.5 Evaluate why teamwork is an important part of healthcare and how it improves patient care.

3.0 Health Maintenance Practices

(Based on National Health Science Standards - 9.1.1, 9.1.2, 9.1.3, 9.1.4, 9.2.1)

Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors.

3.1 Healthy Behaviors

3.1.1 Promote behaviors of health and wellness.

- Exercise
- Nutrition
- Relationships
- Sleep habits
- Stress management
- Weight control

3.1.2 Examine various aspects of behavioral health.

- Anxiety
- Depression
- Substance abuse
- Suicide

3.1.3 Describe strategies for prevention of disease.

- Community health education outreach programs
- Immunizations
- Medical, dental, and mental health screenings
- Routine physical exams
- Stress management

3.1.4 Investigate complementary and alternative health practices as they relate to wellness and disease prevention.

- Acupuncture
- Eastern medicine
- Holistic medicine
- Homeopathy
- Manipulative therapies
- Natural therapies

3.2 Healthcare Across the Lifespan

3.2.1 Discuss physical, mental, social and behavioral development and its impact on healthcare.

4.0 Safety Practices

(Based on National Health Science Standards 7.1.1, 7.1.2, 7.2.1, 7.2.2, 7.2.3, 7.3.1, 7.4.1, 7.4.2, 7.5.1, 7.5.2)

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.

4.1 Infection Control

4.1.1 Explain principles of infection transmission.

4.1.1.1 Identify classifications of pathogens

- Bacteria

- Fungi
 - Parasites
 - Protozoa
 - Viruses
- 4.1.1.2 Describe characteristics of microorganisms
- Aerobic
 - Anaerobic
 - Non-pathogenic
 - a. Pathogenic
- 4.1.1.3 Recognize chain of infection
- 4.1.1.4 Describe mode of transmission
- Common vehicle (air, food, water)
 - Direct
 - Healthcare-associated infections (nosocomial)
 - Indirect
 - Opportunistic
 - Vectors
- 4.1.2 Differentiate methods of controlling the spread and growth of pathogens.
- 4.1.2.1 Asepsis
- Sanitization
 - Antisepsis
 - Disinfection
 - Sterile technique
 - Sterilization
- 4.1.1.2 Standard precautions
- Handwashing
 - Gloving
 - Personal Protective Equipment (PPE)
 - Environmental cleaning
- 4.1.2.3 Isolation precautions
- Transmission-based contact
- 4.1.2.4 Bloodborne pathogen precautions
- 4.1.2.5 Vaccinations
- 4.2 Personal Safety
- 4.2.1 Apply personal safety procedures based on Occupational Safety and Health Administration (OSHA) and Centers for Disease Control (CDC) regulations.
- 4.2.2 Demonstrate principles of body mechanics during patient care.
- Ambulating
 - Lifting
 - Positioning
- 4.2.3 Demonstrate and apply the use of personal protective equipment (PPE).
- 4.3 Environmental Safety
- 4.3.1 Apply safety techniques in the work environment.
- Ergonomics
 - Safe operation of equipment

- Patient/client/employee safety measures
- 4.4 Common Safety Hazards
- 4.4.1 Observe all safety standards related to the occupational exposure to hazardous chemicals standard (safety data sheets [SDS]).
 - 4.4.2 Comply with safety signs, symbols, and labels.
- 4.5 Emergency Procedures and Protocols
- 4.5.1 Practice fire safety in a healthcare setting.
 - 4.5.2 Apply principles of basic emergency response in natural disasters and other emergencies (safe location, contact emergency personnel, follow facility protocols).

5.0 Technical Skills

(Based on National Health Science Standards 10.1)

Apply technical skills required for all career specialties and demonstrate skills and knowledge as appropriate.

- 5.1 Obtain training or certification in
- Automated external defibrillator (AED)
 - Cardiopulmonary resuscitation (CPR)
 - First aid
 - Foreign body airway obstruction (FBAO)

6.0 Employability Skills

(Based on National Health Science Standards - 4.1.1, 4.1.2, 4.2.1, 4.3.1, 4.3.2)

Utilize employability skills to enhance employment opportunities and job satisfaction.

6.1 Personal Traits of the Health Professional

- 6.1.1 Identify personal traits and attitudes desirable in a career ready member of a health team.
- Acceptance of criticism
 - Competence
 - Dependability
 - Discretion
 - Empathy
 - Enthusiasm
 - Honesty
 - Initiative
 - Integrity
 - Patience
 - Positive Attitude
 - Responsibility
 - Self-motivation
 - Tact
 - Team player
 - Willingness to learn

- 6.1.2 Summarize professional standards as they apply to hygiene, dress, language, confidentiality and behavior.

6.2 Employability Skills

- 6.2.1 Apply employability skills in healthcare.
- Chain of command

- Communication Skills
 - Decision making
 - Flexible
 - Organization
 - Problem Solving
 - Scope of practice
 - Time Management
 - Work Ethic
- 6.3 Career Decision-making
- 6.3.1 Research levels of education, credentialing requirements, and employment trends in health professions.
- 6.3.2 Distinguish differences among careers within a health science pathway.
- Biotechnology research and development
 - Diagnostic services
 - Health informatics
 - Support services
 - Therapeutic services
- 6.4 Employability Preparation
- 6.4.1 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
- 6.4.2 Identify strategies for pursuing employment.
- Social media
 - Personal networking
 - Employer websites
 - Internships