

PHYSICAL HEALTHCARE SUBCLUSTER**HEALTHCARE SCIENCE 1 - FOUNDATIONS OF HEALTHCARE PROFESSIONS 5550**

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. Introduces basic medical terminology roots, prefixes, and suffixes to communicate body systems, diseases, and disorders.

GENERAL REQUIREMENTS: This course is designed for students in grades 9-12. Students must have completed Biology 1 or be enrolled concurrently in Biology 1 to take this course. *To advance to Healthcare Science 2 students must achieve a score of 75% or higher in this course. Students scoring less than 75% must have a direct recommendation from the instructor of the course that the minimum requirement was not met.*

PRE-REQUISITES: Biology 1 (can also be taken concurrently with Healthcare Science 1)

CREDIT: CP - 1 unit = (120 hours)

RECOMMENDED CLASS SIZE : 24 students

CONCENTRATOR: Completes HS1 and HS 2 successfully.

COMPLETERS: *For a full explanation of completers visit the Student Reporting Procedures Guide (SRPG) or the SCDE program specific web page.*

Three Course Completer Sample:

HS1, HS 2, HS Human Structure, Function and Disease

OR Four Course Completer Sample:

HS 1, HS 2, HS WBL, Behavioral Health

STACKABLE CREDENTIALS: Please refer to the updated tired credential list on the SCDE Website. This course would be suitable for Tier One or Tier Two Credentials. Examples: First-Aid, Hands-only CPR, Stop the Bleed, or any other applicable credentials listed in the Student Reporting Guide



CURRICULAR ACTIVITIES: HOSA–Future Health Professionals, Service-Learning Projects

STANDARDS

1.0 COMMUNICATION

(Based on National Health Science Standards 2.1 & 2.2)

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
- Reflecting
- Silence
- Summarizing

1.1.2 Identify common barriers to communication.

1.1.2.1 Physical disabilities

- Aphasia
- Developmental level
- Hearing loss
- Impaired vision

1.1.2.2 Psychological barriers

- Attitudes
- Bias
- Prejudice
- Stereotyping

1.1.2.3 Language barriers

1.1.3 Distinguish between subjective and objective information.

1.1.4 Interpret elements of communication using sender-message-receiver feedback model.

1.1.5 Modify communication to meet the needs of the patient/client and be appropriate to the situation.

1.1.6 Describe appropriate interactions with patients throughout various stages of psychosocial development.



1.2 Medical Terminology

1.2.1 Define and recognize entry level medical terminology related to healthcare to communicate information specific to course content. This language may include:

- Root words
- Prefixes
- Suffixes
- Abbreviations

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.

- Examples of healthcare teams
- Responsibilities of team members
- Benefits of teamwork

2.2 Identify characteristics of effective teams.

- Collaboration
- Defined roles
- 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
- Gather the facts
- Mediate disputes
- Negotiate resolutions
- Set clear expectations

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 self-care 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 public health strategies for prevention of disease.

- Community health education outreach programs
- Immunizations
- Routine physical exams- Medical, dental, and mental health screenings
- Self-care behaviors



Healthcare & Human Services

Supporting the Whole Health of Individuals, Families, and Communities

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

- Eastern medicine
- Holistic medicine
- Homeopathic medicine
- Manipulative medicine

3.2 Healthcare Across the Lifespan

3.2.1 Discuss religious and cultural values as they impact healthcare.

- Ageism
- Ethnicity
- Gender
- Race
- Religion

3.2.2 Demonstrate respectful and empathetic treatment of ALL patients/clients.

- Civility
- Customer service
- Patient satisfaction

3.3 History of Healthcare

3.3.1 Describe healthcare history and medical advances

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, 7.4.2, 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
- Pathogenic

4.1.1.3 Recognize chain of infection

4.1.1.4 Describe mode of transmission

- Common vehicles (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

- Antisepsis
- Disinfection
- Sanitization
- Sterile technique
- Sterilization

4.1.1.2 Standard precautions

- Environmental cleaning
- Handwashing
- Gloving
- Personal Protective Equipment (PPE)

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 Explore principles of body mechanics

- 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
- Patient/client/employee safety measures
- Safe operation of equipment

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 Differentiate fire safety protocols in a healthcare setting.

- PASS
- RACE
- Types of Extinguishers

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

- Automated external defibrillator (AED)
- Cardiopulmonary resuscitation (CPR)- hands only
- First aid
- Foreign body airway obstruction (FBAO)
- Stop the Bleed

5.2 Academic Foundation Skills

- Recognize and convert traditional numbers to roman numerals.
- Recognize and convert traditional time to military time.

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
- Social and cultural competence
- 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
- Customer service
- 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

6.3.3 Summarize and demonstrate professional standards as they apply to professional behavior and appearance.

- Hygiene
- Dress
- Language
- Confidentiality

6.4 Employability Preparation

6.4.1 Develop components of a personal portfolio.

- Community Service / Service Learning
- Credentials
- Leadership examples
- Mock interview
- Oral report
- Personal statement
- Professional/student organization memberships
- Resume
- Sample projects
- Technology skills
- Work-based learning documentation
- Writing sample

6.4.2 Identify strategies for pursuing employment.

- Employer websites
- Internships
- Personal networking
- Social media
- Soft Skills

6.4.3 Demonstrate leadership and professional skills by discussing and participating in health science activities such as:

- Role-play scenarios
- HOSA Future Health Professionals activities
- Personal networking
- Job Shadowing (virtual or in person)
- Field studies
- Service project