

Goodheart-Willcox
Correlation Introduction to Health Science, (2024)
Texas Essential Knowledge And Skills For Career Development
And Career And Technical Education
Health Science



Course Name and Number: 127.403 Principles of Health Science (Grade 9-12)

Standards	Correlating Text Pages
(b) Introduction	
(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.	
(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.	
(3) The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.	
(4) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.	
(5) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.	
(6) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.	
(7) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.	
(c) Knowledge and Skills	
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	
(A) express ideas in a clear, concise, and effective manner;	374
(B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and	312-324, 314(Healthcare Professions: Working in a Team), 319 (Dos and Don'ts for Building Positive Relationships)
(C) identify employer expectations such as punctuality, attendance, time management, communication, organizational skills, and productive work habits.	353-354, 313-376, 373 (Healthcare Professions: Poor Listening Skills), 374 (Communication Style Self-Assessment)

Standards	Correlating Text Pages
(2) The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to:	
(A) convert units between systems of measurement;	472-479, 475 (Common Household Measurements and Equivalents), 477 (Conversion Table: Metric to Household and Household to Metric)
(B) apply data from tables, charts, and graphs to provide solutions to health-related problems;	510-514
(C) interpret technical material related to the health science industry;	383-388
(D) organize, compile, and write ideas into reports and summaries;	388-391, 390 (Draft and Revise) 397-401, 397 (Healthcare Professions: Scientific Communication), 616–618. 617 (Healthcare Professions: Mandatory Reporting)
(E) plan and prepare effective oral presentations;	374
(F) formulate responses using precise language to communicate ideas;	388-396, 393 (Effective Correspondence)
(G) describe biological and chemical processes that maintain homeostasis;	758, 760-761, 797, 798 (Hormones help the body maintain homeostasis)
(H) identify and analyze principles of body mechanics and movement such as forces and the effects of movement, torque, tension, and elasticity on the human body;	34, 45, 685-698, 699-710

Standards	Correlating Text Pages
(I) identify human needs according to Maslow's Hierarchy of Human Needs;	586-287, 287 Figure 9.19 The five levels of need
(J) describe the stages of development related to the life span;	23-27
(K) identify the concepts of health and wellness throughout the life span;	214-215
(L) analyze and evaluate communication skills for maintaining healthy relationships throughout the life span;	373-376, 383-396, 384 (Healthcare Professions Reading and Writing), 393 (Effective Correspondence)
(M) research the historical significance of health care;	6-27 7 [Top 10 Lifesaving Medical Advances), 7 (Healthcare Advances) 10-11 (Highlights in the History of Medicine)
(N) describe the impact of health services on the economy;	547-553, 548 (The Nation's Health Dollar) 549 (National Healthcare Expenditures, 1960-2020)
(O) analyze the impact of local, state, and national government on the health science industry;	538-540
(P) identify diverse and cultural influences that have impacted contemporary aspects of health care delivery; and	413-421, 413 (Steps to Help Your Patients Understand), 418 (Health care Professions, Cultural Competence), 585-589, 586(Cultural Issues May Affect Healthcare Communication), 587 (Belief Systems May Influence Care Decisions)

Standards	Correlating Text Pages
(Q) research and compare practices used by various cultures and societies to solve problems related to health.	413-421, 413 (Steps to Help Your Patients Understand), 418 (Health care Professions, Cultural Competence), 585-589, 586 (Cultural Issues May Affect Healthcare Communication), 587 (Belief Systems May Influence Care Decisions)
(3) The student uses verbal and nonverbal communication skills. The student is expected to:	
(A) identify components of effective and non-effective communication;	373-376, 383-396, 384 (Healthcare Professions Reading and Writing), 393 (Effective Correspondence)
(B) demonstrate effective communication skills for responding to the needs of individuals in a diverse society;	413-414
(C) evaluate the effectiveness of conflict-resolution techniques in various situations; and	319-321
(D) accurately interpret, transcribe, and communicate medical vocabulary using appropriate technology.	642-664, 644 (Word Parts), 645 (Plural Forms of Common Latin and Greek Suffixes), 647 (Pronunciation Rules).
(4) The student implements the leadership skills necessary to function in a democratic society. The student is expected to:	
(A) identify traits of a leader;	323-324, 323 (Leadership. Skills), 324 (Healthcare Professions: Leadership Styles)
(B) demonstrate leadership skills, characteristics, and responsibilities of leaders such as goal-setting and team building; and	323-324, 323 (Leadership. Skills), 324 (Healthcare Professions: Leadership Styles)
(C) demonstrate the ability to effectively conduct and participate in meetings.	323-324, 323 (Leadership. Skills), 324 (Healthcare Professions: Leadership Styles)

Standards	Correlating Text Pages
(5) The student assesses career options and the preparation necessary for employment in the health science industry. The student is expected to:	
(A) locate, evaluate, and interpret career options and employment information; and	100-104, 100 (Flowchart), 102 (Examples of Healthcare Occupations by Pathway)
(B) recognize the impact of career decisions, including the causes and effects of changing employment situations.	100-101
(6) The student identifies academic preparation and skills necessary for employment as defined by the health science industry. The student is expected to identify academic requirements for professional advancement such as certification, licensure, registration, continuing education, and advanced degrees.	
(7) The student identifies the career pathways related to health science. The student is expected to:	
(A) compare health science careers within the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems; and	100-104, 100 (Flowchart), 102 (Examples of Healthcare Occupations by Pathway)
(B) identify the collaborative role of team members between systems to deliver quality health care.	312-324, 314(Healthcare Professions: Working in a Team), 319 (Dos and Don'ts for Building Positive Relationships)
(8) The student examines the role of the multidisciplinary team in providing health care. The student is expected to:	
(A) explain the concept of teaming to provide quality health care; and	312-324, 314(Healthcare Professions: Working in a Team), 319 (Dos and Don'ts for Building Positive Relationships)
(B) examine the role of professional organizations in the preparation and governance of credentialing and certification.	357-359
(9) The student interprets ethical behavior standards and legal responsibilities. The student is expected to:	
(A) compare published professional codes of ethics and scope of practice;	578-599, 582 (Steps of Ethical Decision Making), 588 (Healthcare Professions: Ethical Principles)

Standards	Correlating Text Pages
(B) explain principles of ethical behavior and confidentiality, including the consequences of breach of confidentiality;	578-579, 582, 582 (Steps for Ethical Decision Making)
(C) discuss ethical issues related to health care, including implications of technological advances;	585, 589-592
(D) examine issues related to malpractice, negligence, and liability; and	611-613
(E) research laws governing the health science industry.	610-633, 617 (Healthcare Professions: Mandatory Reporting), 626 (Figure 16.14 CLIA Requirements)
10. The student recognizes the rights and choices of the individual. The student is expected to:	
(A) identify situations related to autonomy;	579
(B) identify wellness strategies for the prevention of disease;	280-285, 284 (Examples Social Determinants of Health)
(C) evaluate positive and negative effects of relationships on physical and emotional health such as peers, family, and friends in promoting a healthy community;	278-279
(D) review documentation related to rights and choices; and	615-616, 619-626

Standards	Correlating Text Pages
(E) demonstrate an understanding of diversity and cultural practices influencing contemporary aspects of health care.	413-421, 413 (Steps to Help Your Patients Understand), 418 (Health care Professions, Cultural Competence), 585-589, 586(Cultural Issues May Affect Healthcare Communication), 587 (Belief Systems May Influence Care Decisions)
11. The student recognizes the importance of maintaining a safe environment and eliminating hazardous situations. The student is expected to:	
(A) identify governing regulatory agencies such as the World Health Organization, Centers for Disease Control and Prevention, Occupational Safety and Health Administration, U.S. Food and Drug Administration, Joint Commission, and National Institute of Health;	538-540
(B) identify industry safety standards such as standard precautions, fire prevention and safety practices, and appropriate actions to emergency situations; and	34-79, 36-37 (Healthcare Professions: Performing a Safety Check), 54, (Standard Precautions Recommended by the CDC)
(C) relate safety practices in the health science industry.	34-79, 36-37 (Healthcare Professions: Performing a Safety Check), 54, (Standard Precautions Recommended by the CDC)
12. The student identifies the technology used in the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems. The student is expected to:	
(A) research and identify technological equipment used in the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems;	127-128, 428-431, 435-445, 448, 450 464, 483(Healthcare Professions Auto Management).
(B) identify potential malfunctions of technological equipment; and	212-213
(C) recognize and explain the process for reporting equipment or technology malfunctions.	212-213