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## Correlation of Health Science: Concepts and Applications 1E ©2018

to the Department of Defense Education Activity (DoDEA)

Health Science Career Cluster (HL)

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STANDARD	G-W CORRELATING PAGES
HL 01 Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.	
1. Utilize knowledge of human structure and function to conduct health care role.	Instruction: 162–201 (Chapter 6: Anatomy and Physiology) Application: 347 (#18, 21, 24); 371 (#26, 28, 29)
2. Utilize knowledge of diseases and disorders to conduct health care role.	Instruction: 204–233 (Chapter 7: Disease) Application: 235 (#35)
HL 02 Explain the healthcare worker's role within their department, their organization and the overall healthcare system.	
1. Explain systems theory as it applies to the health care environment.	Instruction: 17–23 (The United States' Healthcare Industry Today) Application: 33 (#21–22)
2. Explain the concept of system change as it applies to the health care environment.	Instruction: 6–17 (A Brief History of Healthcare; The Twentieth Century and Beyond); 292–309 (Healthcare Technology)  Application: 33 (#25–30); 313 (#21, #25)
3. Understand the existing and potential hazards to clients, co-workers and self.	Instruction: 92–127 (Chapter 4: Safety and Infection Control)  Application: 96 (Check Your Understanding #1–4); 98 (Check Your Understanding #1–4); 102 (Check Your Understanding #1–5); 108 (Check Your Understanding #1–5); 117 (Check Your Understanding #1–4); 127 (Needlestick Incidents, Apply It #1–4); 129 (#22, 24–26, 29, 33–34)
4. Identify and explain key systems of the health care delivery system.	Instruction: 24–30 (Healthcare Facilities) Application: 30 (Check Your Understanding #1–5); 33 (#32)
HL 03 Identify existing and potential hazards to clients, coworkers, visitors and self in the healthcare workplace.	
1. Explain infection control practices and procedures.	Instruction: 110–127 (Infection Control) Application: 129 (#25–27, 34)
2. Demonstrate personal safety practices.	Instruction: 92–96 (Safety); 100–108 (Employee Safety); 110–117 (Infection Control); 121–125 (Personal Protective Equipment)

	<b>Application:</b> 102 (Check Your Understanding #1–5); 108 (Check Your Understanding #1–5); 129 (#24–25, 27, 31); 131 (#21)
3. Use techniques to insure environmental safety.	Instruction: 92–96 (Safety in Healthcare Facilities); 100– 108 (Employee Safety); 121–125 (Personal Protective Equipment) Application: 102 (Check Your Understanding #1–5); 108 (Check Your Understanding #1–5); 129 (#23, 28–29, 34); 131 (#23)
4. Identify common safety hazards.	Instruction: 92–108 (Safety) Application: 96 (Check Your Understanding #1–4); 98 (Check Your Understanding #1–4); 102 (Check Your Understanding #1–5); 129 (#24); 131 (#23)
5. Describe healthy behaviors.	Instruction: 92–96 (Safety in Healthcare Facilities); 242–247 (Physical Health, Mental and Emotional Health); 256–263 (Social Health, Managing Stress, Disease Prevention)  Application: 246 (Check Your Understanding #1–3); 263 (Check Your Understanding #1–6); 269 (#27, 31–32, 34, 37)
6. Utilize emergency procedures and protocols.	Instruction: 92–96 (Safety in Healthcare Facilities); 100– 108 (Employee Safety); 350–369 (Chapter 12: First Aid) Application: 96 (Check Your Understanding #1–4); 356 (Check Your Understanding #1–5); 362 (Check Your Understanding #1–6); 371 (#21–24, 26, 30, 32)
HL 04 Evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care.	
1. Describe team member participation.	Instruction: 538–541 (Teamwork) Application: 561 (#28, 36–37)
2. Identify and describe health care teams.	Instruction: 538–541 (Teamwork) Application: 561 (#28, #36–37)
3. Employ communication strategies used in the delivery of quality health care.	Instruction: 450–458 and 463–471 (Chapter 15: Communication Skills) Application: 463 (Check Your Understanding #1–5); 473 (#24, 30)
HL 05 Analyze the legal and ethical responsibilities, limitations and implications of actions within the healthcare workplace.	
Describe legal implications affecting health care workers.	Instruction: 72–74 (Medical Ethics and Legal Responsibilities) Application: 75 (Check Your Understanding #1, 4); 82 (Scope of Practice, Apply It #1–3); 87 (Acceptable Speech, Apply It #1–3); 89 (#24, 34)

Describe legal practices employed by health care workers.	Instruction: 74–85 (Chapter 3: Healthcare Laws and Ethics) Application: 75 (Check Your Understanding, #1–5); 80 (Check Your Understanding #1–5); 82 (Check Your Understanding #1–5)
HL 06 Evaluate accepted ethical practices with respect to cultural, social and ethnic differences within the healthcare workplace.	
Describe legal and ethical boundaries in health care delivery.	Instruction: 72–74 and 82–87 (Chapter 3: Healthcare Laws and Ethics)  Application: 75 (Check Your Understanding #2–5); 89 (#23–24, 31–32, 34–35)
Describe ethical practice as it applies to health care delivery.	Instruction: 72–74 (Medical Ethics and Legal Responsibilities) Application: 73 (Ethical Issues in Healthcare Today, Apply It #1–2); 75 (Check Your Understanding #2–5); 89 (#22, 30–32, 34)
3. Explain cultural, social and ethnic diversity as it applies to health care delivery.	Instruction: 87 (Discrimination in the Workplace); 464–465 (Cultural Differences in Nonverbal Communication) Application: 473 (#28, #31)

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## to the Department of Defense Education Activity (DoDEA) Career and Technical Education Course Competency Guide Health Science I – PTH402

	STANDARD	G-W CORRELATING PAGES
1.00 In	nplementing DoDEA's Career Ready Practices	
1.01	Demonstrate DoDEA's Career Ready Practices in course activit	ies
a.	Act as a responsible and contributing citizen and employee.	Instruction: 536–543 (Personal Characteristics) Application: 544 (Check Your Understanding #1–2); 561 (#20, 28, 36, 39)
b.	Apply appropriate academic and technical skills.	Instruction: 414–443 (Chapter 14: Working in Healthcare); 448–473 (Chapter 15: Communication Skills); 474–505 (Chapter 16: Medical Math Skills) Application: 443 (#15, 20); 445 (#20, 23); 473 (#28, 30); 502 (#23–32); 504–505 (#1–75)
c.	Attend to personal health and financial wellbeing.	Instruction: 242–258 (Chapter 8: Health and Wellness) Application: 246 (Check Your Understanding #1–3); 269 (#31–32, 34, 37)
d.	Communicate clearly and effectively and with reason.	Instruction: 448–473 (Chapter 15: Communication Skills) Application: 473 (#26–30)
e.	Consider the environmental, social, and economic impacts of decisions.	Instruction: 39–40 (Decision Making); 66 (Career Research) Application: 69 (#32–36)
f.	Demonstrate creativity and innovation.	Instruction: 49 (Physical Therapy and Occupational Therapy Workers); 260 (Real Life Scenario Role Playing) Application: 473 (#28, 30); 563 (#21); 161 (#44)
g.	Employ valid and reliable research strategies.	Instruction: 39 (Choosing a Career Path); 66 (Career Research) Application: 33 (#29–30); 69 (#33); 89 (#32–33); 131 (#25–26)
h.	Utilize critical thinking to make sense of problems and persevere in solving them.	Instruction: 516–517 (Critical Thinking and Problem Solving) Application: 517 (Check Your Understanding #1–5); 533 (#34)
i.	Model integrity, ethical leadership, and effective management.	Instruction: 542–543 (Trustworthy Employees); 538 (Teamwork; Extend Your Knowledge Researching Great Leaders) Application: 538 (Extend Your Knowledge #1–2); 561 (#26–28, 36–37)

j.	Plan education and career paths aligned to personal goals.	Instruction: 36–43 (Planning for a Career in Healthcare; Choosing a Career Path) Application: 43 (Check Your Understanding #1–5); 69 (#20, 26, 29–34)
k.	Work productively in teams while using cultural global competence.	Instruction: 538–541 (Teamwork); 258 (Community Connections); 464–465 (Cultural Differences in Nonverbal Communication) Application: 561 (#28, 36–37)
2.00 Hu	man Anatomy and Physiology	
	ntify basic levels of organization of the human nemical; cellular; tissues; organs; systems; m	Instruction: 164–168 (Chemical Composition of the Human Body; Cells; Tissue; Organs; The Body Systems)  Application: 167 (Check Your Understanding #1–4); 202–203 (#11, 20, 40–41)
2.02 Anal	yze basic structures, functions, and planes of huma	n body systems:
a.	Skeletal (bone anatomy, axial and appendicular skeletal bones, functions of bones, ligaments, types of joints)	Instruction: 172–174 (Bones; Joints) Application: 176 (Check Your Understanding #3); 203 (#24, 33, 36)
b.	Muscular (microscopic anatomy of muscle tissue, types of muscle, locations of skeletal muscles, functions of muscles, tendons, directional movements)	Instruction: 174–177 (Muscles) Application: 176 (Check Your Understanding #4); 202–203 (#16, 22); 237 (#23)
c.	Integumentary (layers, structures and functions of skin)	Instruction: 170–171 (The Integumentary System) Application: 176 (Check Your Understanding #2); 202–203 (#17–18, 41)
d.	Cardiovascular (components of blood, structures and functions of blood components, structures and functions of the cardiovascular system, conduction system of the heart, cardiac cycle)	Instruction: 186–190 (The Cardiovascular System) Application: 194 (Check Your Understanding #1–2); 202–203 (#14, 23, 26, 30, 37, 39, 41); 236–237 (#18, 20, 25)
e.	Lymphatic (structures and functions of lymphatic system, movement of lymph fluid)	Instruction: 190–194 (The Lymphatic and Immune Systems) Application: 194 (Check Your Understanding #3–4); 202–203 (#13, 29, 41); 236 (#18)
f.	Respiratory (structures and functions of respiratory system, physiology of respiration)	Instruction: 184–186 (The Respiratory System) Application: 186 (Check Your Understanding #4); 202–203 (#19, 32, 41)
g.	Nervous (structures and functions of nervous tissue and system, organization of nervous system)	Instruction: 176, 178–179 (The Nervous System) Application: 186 (Check Your Understanding #1); 203 (#41, 42)

h.	Special senses (structures and functions of eye, ear, nose, and tongue; identify senses for sight, hearing, smell, taste, touch)	Instruction: 180–183 (The Sensory System) Application: 186 (Check Your Understanding #2); 202 (#12)
i.	Endocrine (endocrine versus exocrine, structures and functions of endocrine system, hormones, regulation of hormones)	Instruction: 183–184 (The Endocrine System) Application: 186 (Check Your Understanding #3); 203 (#28, 31, 34)
j.	Digestive (structures and functions of gastrointestinal tract, chemical and mechanical digestion, structures and functions of accessory organs)	Instruction: 194–196 (The Gastrointestinal System) Application: 199 (Check Your Understanding #1); 203 (#41)
k.	Urinary (structures and functions of urinary system, gross and microscopic anatomy, process of urine formation, urine composition, homeostatic balance)	Instruction: 196–198 (The Urinary System) Application: 199 (Check Your Understanding #2); 203 (#38, 41)
l.	Reproductive (structures and functions of male and female reproductive systems, formation of gametes, hormone production and effects, menstrual cycle, and conception)	Instruction: 198–201 (The Reproductive System) Application: 199 (Check Your Understanding #3); 203 (#20, 25, 35)
3.00 Di	seases and Disorders	
body sy diabete hepatit	escribe common diseases and disorders of each vistem (to include, but not limited to, cancer, es, dementia, stroke, heart disease, tuberculosis, is, COPD, kidney disease, arthritis, ulcers, etc.), ving etiology; pathology; diagnosis; treatment; and tion.	Instruction: 209–230 (Chapter 7: Disease) Application: 234–235 (#11–38); 236–237 (#11, 17, 19, 21, 26, 27)
practice prevent medicir	vestigate complementary and alternative health es as they relate to wellness and disease tion (to include, but not limited to, Eastern ne, holistic medicine, homeopathy, manipulative tural therapies).	Instruction: 266–267 (Alternative Health Practices and Therapies); 242 (definition of holistic health) Application: 268–#1, 25, 29, 34); 312 (#6, 15)
4.00 Co	ommunication Skills	
4.01 Re	port relevant information communication skills.	Instruction: 450–453 (Verbal Communication; Engagement; Communicating Needs, Wants, and Emotions); 458–463 (The Sender–Receiver Communication Model; Telephone Etiquette; Public Speaking; Meetings) Application: 472–473 (#11, 14, 24, 26–28, 30)
	terpret elements of verbal and nonverbal inication.	Instruction: 450–451 (Verbal Communication); 463–466 (Nonverbal Communication; Proxemics) Application: 472–473 (#18, 19, 22, 26, 31)
4.03 Dis	scuss communication barriers.	Instruction: 454–457 (Verbal Communication Challenges); 468 (Barriers to Active Listening)

	Application: 289 (#34); 472 (#12); 473 (#21)
4.04 Apply interpersonal communication skills.	Instruction: 248 (Extend Your Knowledge, Emotional Intelligence); 458 (The Sender–Receiver Communication Model); 541–542 (Conflict Resolution)  Application: 248 (Extend Your Knowledge #1–2); 473 (#24, 30)
4.05 Report relevant information in order of occurrence.	Instruction: 298 (Guidelines for Documentation in Electronic Medical Records); 470 (Objective Versus Subjective Writing) Application: 313 (#25)
4.06 Organize, write, and compile technical information and summaries.	Instruction: 298–299 (Guidelines for Documentation in Electronic Medical Records; Correcting the Electronic Medical Record)  Application: 310–311 (#11, 14, 31, 34); 312–313 (#11, 16, 25)
4.07 Use medical terminology within a scope of practice in order to interpret, transcribe, and communicate information, data, and observations.	Instruction: 139–140 (Combining Word Elements); 145 (Using Medical Terminology Appropriately); 298 (Guidelines for Documentation in Electronic Medical Records) Application: 161 (#37, 44); 310 (#11); 311 (#33)
4.08 Analyze medical and dental terminology.	Instruction: 136–139 (Building Medical Terms); 145–151 (Using Medical Terminology Appropriately; Terms for Location and Movement)  Application: 137 (Check Your Understanding); 144 (Check Your Understanding #1–10); 160–161 (#11–12, 15–16, 18, 22–33, 35, 36, 42)
4.09 Interpret medical word roots, prefixes, and suffixes.	Instruction: 136–141 (Building Medical Terms; Combining Word Elements; Pronunciation and Spelling of Medical Terms); 152–159 (Medical Terminology Reference Tables)  Application: 160–161 (#13–14, 17, 19, 22–27, 34–36)
4.10 Analyze words commonly used in medical/dental care.	Instruction: 141–151 (Chapter 5: Medical Terminology)  Application: 141 (Check Your Understanding #1–10); 144  (Check Your Understanding #1–10); 145 (Real Life Scenario #1–2); 160–161 (#11, 12, 15–16, 20, 38, 40, 44)
5.00 Legal and Ethical Boundaries	
5.01 Differentiate between morality and ethics and the relationship of each to healthcare outcomes.	Instruction: 72–73 (Medical Ethics in the Workplace; Ethical Behavior; Ethic Committees in Healthcare Facilities); 542–543 (Trustworthy Employees) Application: 88–89 (#11, 18, 22, 31, 34, 35)
5.02 Differentiate between ethical and legal issues impacting healthcare.	Instruction: 72–82 (Chapter 3: Healthcare Laws and Ethics)

	<b>Application:</b> 73 (Extend Your Knowledge #1–2); 75 (Check Your Understanding #1–5; Extend Your Knowledge #1); 80 (Check Your Understanding #1–5); 82 (Real Life Scenario #1–3; Check Your Understanding #1–5); 88–89 (#11–36)
5.03 Contrast personal, professional, and organizational ethics.	Instruction: 72–73 (Medical Ethics in the Workplace; Ethical Behavior; Ethic Committees in Healthcare Facilities); 542–543 (Trustworthy Employees) Application: 88–89 (#11, 18, 22, 31, 34, 35)
5.04 Analyze legal and ethical aspects of confidentiality (to include, but not limited to, HIPAA, HITECH Act, and EMR/HER security and protection).	Instruction: 82–85 (Confidentiality; Real Life Scenario, Confidentiality; Exceptions for Releasing Patient Information; Patient Consent Forms); 294–295 (Protecting Patient Confidentiality)  Application: 84 (Real Life Scenario #1–2); 88–89 (#12, 17, 20); 130 (#12); 296 (Check Your Understanding #1, 3, 4); 310–311 (#1, 4, 17)
5.05 Follow mandated standards for workplace safety (to include, but not limited to, OSHA, CDC, CLIA, security issues for specific healthcare facility).	Instruction: 92–96 (Safety in Healthcare Facilities); 100– 108 (Employee Safety); 125–127 (Needlesticks and Other Sharps-Related Injuries; Protocol for Disposal of Hazardous Materials) Application: 96 (Check Your Understanding #1–4); 102 (Check Your Understanding #1–5); 108 (Check Your Understanding #1–5); 128–129 (#12, 14, 16, 19, 23, 24, 29)
5.06 Discuss bioethical issues related to healthcare.	Instruction: 73 (Extend Your Knowledge, Ethical Issues in Healthcare Today); 127 (Recycling and Waste Reduction); 230–232 (Biotechnology Research to Fight Disease)  Application: 73 (Extend Your Knowledge #1–2); 129 (#31–32)
5.07 Analyze and evaluate the implications of medical ethics.	Instruction: 72–74 (Medical Ethics and Legal Responsibilities; Extend Your Knowledge, Ethical Issues in Healthcare Today) Application: 73 (Extend Your Knowledge #1–2); 88–89 (#11, 18, 22, 31, 34, 35)
5.08 Analyze legal responsibilities and implications of criminal and civil law: Malpractice, Negligence, Assault, Battery, Invasion of Privacy, Abuse, Libel, and Slander.	Instruction: 74–82 (Medical Law; Extend Your Knowledge, Civil Law and Criminal Law; Legal Protections for Patients and Healthcare Workers; Real Life Scenario, Assault or Proper Patient Care?; Real Life Scenario, Scope of Practice)  Application: 75 (Extend Your Knowledge #1); 80 (Check Your Understanding #1–5; Real Life Scenario #1–2); 82 (Real Life Scenario #1–3; Check Your Understanding #1–5); 88–89 (#14, 16–17, 23–24, 26, 28, 35–36)