



Goodheart-Willcox Publisher	
Correlation of <i>INTRODUCTION TO ANATOMY AND PHYSIOLOGY 2E</i> ©2021	
NCHSE 2020 Curriculum Framework	
Human Structure, Function, and Disease (A)	
STANDARD	G-W CORRELATING PAGES
1.0 Medical Terminology	
Demonstrate methods of delivering and obtaining information, while communicating effectively	
1.1 Use common roots, prefixes, and suffixes to communicate information regarding body systems, diseases and disorders	5, 42, 43, 49, 76, 94, 202, 271, 310, 465, 468, 472, 478, 522, 530, 556, 574, 604, 640–643
1.2 Interpret common medical abbreviations	644
2.0 Anatomy and Physiology	
Understand human anatomy, physiology, common diseases and disorders, and medical math principles.	
2.1 Identify basic levels of organization of the human body <ul style="list-style-type: none">• Chemical• Cellular• Tissue• Organs• Systems• Organism	12 12 12 12 12 12
2.2 Identify body planes, directional terms, cavities, and quadrants. <ul style="list-style-type: none">• Body planes (sagittal, mid-sagittal, coronal/frontal, transverse/horizontal)• Directional terms (superior, inferior, anterior/ventral, posterior/dorsal, medial, lateral, proximal, distal, superficial, and deep)• cavities (dorsal, cranial, spinal, thoracic, abdominal, and pelvic)• Quadrants (upper right, lower right, upper left, and lower left)	5–6, 11 7, 35 8–9 7–8
2.3 Investigate the process of homeostasis.	12–16, 17, 18, 36, 58, 85, 100, 123, 218, 303–305, 306, 312–313, 316, 334, 378, 381, 529, 532, 564–565
2.4 Skeletal System	
2.4.1 Structures of the skeletal system <ul style="list-style-type: none">• Distinguish between axial and appendicular skeletons• Describe long bone anatomy	132, 142, 169 125–130

<ul style="list-style-type: none"> Identify joint types and movement Name and classify all bones (206) 	151–154, 169 132–150
2.4.2 Functions of the skeletal system <ul style="list-style-type: none"> Structure and support Muscle attachment and movement Mineral storage Hematopoiesis 	122, 168 122, 167 123, 167 123, 167, 388–389
2.5 Muscular System	
2.5.1 Structures of the muscular system <ul style="list-style-type: none"> Identify types of muscle tissue Identify major muscle groups of neck, shoulder, chest, abdomen, back, arms and legs 	174–176 189–199
2.5.2 Functions of the muscular system <ul style="list-style-type: none"> Body movement Posture Protection 	173, 174 178, 192, 198 194, 202
2.6 Integumentary System	
2.6.1 Structures of the integumentary system <ul style="list-style-type: none"> Identify integumentary components Label the layers of skin 	93 95, 118
2.6.2 Functions of the integumentary system <ul style="list-style-type: none"> Vitamin D production Sensory organ Infection protection Temperature regulation UV light protection 	93, 94 94 94 94 94
2.7 Cardiovascular System	
2.7.1 Structures of the cardiovascular system <ul style="list-style-type: none"> Identify cardiovascular organs Label the parts of the heart Distinguish blood components 	414, 427–432 414–417 378–390
2.7.2 Functions of the cardiovascular system <ul style="list-style-type: none"> Blood flow through the heart and body Transportation of nutrients, waste, antibodies, hormones, and gases Cardiac conduction system 	427–436 414, 427–428, 430, 432, 436 423–426
2.8 Lymphatic/Immune System	
2.8.1 Structures of the lymphatic system <ul style="list-style-type: none"> Identify lymphatic organs 	464–473

2.8.2 Functions of the lymphatic system <ul style="list-style-type: none"> Provides protection against disease Movement of lymph fluid 	474–491 464–468
2.9 Respiratory System	
2.9.1 Structures of the respiratory system <ul style="list-style-type: none"> Identify respiratory organs 	340–347
2.9.2 Functions of the respiratory system <ul style="list-style-type: none"> Gas exchange 	348–356
3.0 Diseases and Disorders (Skeletal, Muscular, Integumentary, Cardiovascular, Lymphatic, Respiratory)	156, 161 201, 202, 205 104, 107, 108, 109 397, 399, 401, 445, 447, 448, 450 493 358, 360, 361, 366
3.1 Describe etiology, pathology, diagnosis, treatment, and prevention of common diseases and disorders, including, but not limited to the following: <ul style="list-style-type: none"> Arthritis Asthma Cancer Cystic Fibrosis Melanoma Muscular Dystrophy Myocardial Infarction Stroke/Cardiovascular Accident (CVA) Tuberculosis 	161, 162, 163, 170, 253, 398, 400, 496 361, 363–364, 374 65, 66–67, 77, 86, 105, 106, 107, 111–112, 365–366, 373, 401, 402–404, 492–494, 495, 499, 506, 542 366 111–112 205–206 448, 449, 450–451, 453, 460 452 360
3.2 Discuss research related to emerging diseases and disorders (such as: autism, VRSI, PTSD, Listeria, seasonal flu)	499
3.3 Describe biomedical therapies as they relate to prevention, pathology, and treatment of disease. <ul style="list-style-type: none"> Gene testing Gene therapy Cloning Stem cell research 	590, 628 495, 628 485 384, 402, 405
4.0 Medical Mathematics	
4.1 Demonstrate competency using basic math skills and mathematical conversions as they relate to Healthcare.	9–10, 119, 170, 637, 638–639

4.2 Demonstrate the ability to analyze diagrams, charts, graphs, and tables to interpret healthcare results.	38, 86, 214, 260, 296–297, 336–337, 374, 410, 460, 506, 549, 586
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