

Course Title: Anatomy & Physiology Honors			
Course Number: 2000360			
NGSSS Benchmark	Content Focus	Number of Questions	Suggested Cognitive Complexity (per CPALMS)
Reporting Category 1: Tissues			
SC.912.L.14.11	Classify and state the defining characteristics of epithelial tissue, connective tissue, muscle tissue, and nervous tissue.	2	2 Level 2
<i>Reporting Category Total</i>		2	
Reporting Category 2: Integumentary System			
SC.912.L.14.51	Describe the function of the vertebrate integumentary system.	1	1 Level 1 1 Level 2
<i>Reporting Category Total</i>		1	
Reporting Category 3: Skeletal System			
SC.912.L.14.12	Describe the anatomy and histology of bone tissue	1	1 Level 1
SC.912.L.14.13	Distinguish between bones of the axial skeleton and the appendicular skeleton.	1	1 Level 2
SC.912.L.14.14	Identify the major bones of the axial and appendicular skeleton.	2	1 Level 1 1 Level 2
SC.912.L.14.15	Identify major markings (such as foramina, fossae, tubercles, etc.) on a skeleton. Explain why these markings are important.	1	1 Level 2
<i>Reporting Category Total</i>		5	
Reporting Category 4: Muscular System			
SC.912.L.14.16	Describe the anatomy and histology, including ultrastructure of muscle tissue. * No items in IBTP	1	1 Level 1
SC.912.L.14.18	Describe signal transmission across a myoneural junction.	2	1 Level 1 1 Level 3 2 Level 2
SC.912.L.14.19	Explain the physiology of skeletal muscle.	1	1 Level 2
SC.912.L.14.20	Identify the major muscles of the human on a model or diagram.	2	1 Level 1 2 Level 2
SC.912.L.18.8	Identify the reactants, products, and basic functions of aerobic and anaerobic cellular respiration. * No items in IBTP	1	1 Level 2
<i>Reporting Category Total</i>		5	
Reporting Category 5: Nervous System & Special Senses			
SC.912.L.14.21	Describe the anatomy, histology, and physiology of the central and peripheral nervous systems and name the major divisions of the nervous system.	2	1 Level 1 1 Level 2
SC.912.L.14.22	Describe the physiology of nerve conduction, including the generator potential, action potential, and synapse.	2	2 Level 2
SC.912.L.14.23	Identify the parts of a reflex arc. * No items in IBTP	1	1 Level 1
SC.912.L.14.25	Identify the major parts of a cross section through the spinal cord. * No items in IBTP	1	1 Level 1
SC.912.L.14.27	Identify the functions of the major parts of the brain,	2	2 Level 1

	including the meninges, medulla, pons, midbrain, hypothalamus, thalamus, cerebellum, and cerebrum.		1 Level 3
SC.912.L.14.28	Identify the major functions of the spinal cord. * No items in IBTP	1	1 Level 1
SC.912.L.14.49	Identify the major functions associated with the sympathetic and parasympathetic nervous systems.	2	1 Level 1 1 Level 2
SC.912.L.14.50	Describe the structure of vertebrate sensory organs. Relate structure to function in vertebrate sensory systems.	2	1 Level 2
<i>Reporting Category Total</i>		10	
<i>Reporting Category 6: Endocrine System</i>			
SC.912.L.14.29	Define the terms endocrine and exocrine. * No items in IBTP	1	1 Level 1
SC.912.L.14.30	Compare endocrine and neural controls of physiology.	1	1 Level 2
SC.912.L.14.31	Describe the physiology of hormones including the different types and the mechanism of their action.	2	2 Level 1 1 Level 2 1 Level 3
<i>Reporting Category Total</i>		3	
<i>Reporting Category 7: Blood & Cardiovascular System</i>			
SC.912.L.14.34	Describe the composition and physiology of blood, including that of the plasma and the formed elements.	1	1 Level 2
SC.912.L.14.35	Describe the steps in hemostasis, including the mechanism of coagulation. Include the basis for blood typing and transfusion reactions.	2	2 Level 2 1 Level 3
SC.912.L.14.36	Describe the factors affecting blood flow through the cardiovascular system.	1	1 Level 2
SC.912.L.14.37	Explain the components of an electrocardiogram. * No items in IBTP	1	1 Level 1
SC.912.L.14.38	Describe normal heart sounds and what they mean. * No items in IBTP	1	1 Level 2
SC.912.L.14.39	Describe hypertension and some of the factors that produce it.	1	1 Level 2
SC.912.L.14.40	Describe the histology of the major arteries and veins of systemic, pulmonary, hepatic portal, and coronary circulation. * No items in IBTP	2	2 Level 2
SC.912.L.14.41	Describe fetal circulation and changes that occur to the circulatory system at birth. * No items in IBTP	1	1 Level 2
<i>Reporting Category Total</i>		5	
<i>Reporting Category 8: Lymphatic System</i>			
SC.912.L.14.42	Describe the anatomy and the physiology of the lymph system.	1	1 Level 2 1 Level 1
SC.912.L.14.52	Explain the basic functions of the human immune system, including specific and nonspecific immune response, vaccines, and antibiotics.	2	1 Level 1 1 Level 2
<i>Reporting Category Total</i>		3	
<i>Reporting Category 9: Respiratory System</i>			
SC.912.L.14.43	Describe the histology of the respiratory system. * No items in IBTP	1	1 Level 2
SC.912.L.14.44	Describe the physiology of the respiratory system including the mechanisms of ventilation,	3	3 Level 2 1 Level 3

	gas exchange, gas transport and the mechanisms that control the rate of ventilation.		
<i>Reporting Category Total</i>		3	
<i>Reporting Category 10: Digestive System</i>			
SC.912.L.14.45	Describe the histology of the alimentary canal and its associated accessory organs. <i>* No items in IBTP</i>	1	1 Level 2
SC.912.L.14.46	Describe the physiology of the digestive system, including mechanical digestion, chemical digestion, absorption and the neural and hormonal mechanisms of control.	3	3 Level 2 1 Level 3
SC.912.L.18.1	Describe the basic molecular structures and primary functions of the four major categories of biological macromolecules.	1	1 Level 2
<i>Reporting Category Total</i>		4	
<i>Reporting Category 11: Urinary System</i>			
SC.912.L.14.47	Describe the physiology of urine formation by the kidney.	2	2 Level 2
SC.912.L.14.48	Describe the anatomy, histology, and physiology of the ureters, the urinary bladder, and the urethra.	1	1 Level 2
<i>Reporting Category Total</i>		3	
<i>Reporting Category 12: Reproductive System</i>			
SC.912.L.14.33	Describe the basic anatomy and physiology of the reproductive system. Describe the process of human development from fertilization to birth and major changes that occur in each trimester of pregnancy.	2	2 Level 2
<i>Reporting Category Total</i>		2	
<i>Reporting Category 13: Personal Health</i>			
HE.912.C.1.3	Evaluate how environment and personal health are interrelated.	1	1 Level 2
HE.912.C.1.5 (1.8 old)	Analyze strategies for prevention, detection, and treatment of communicable and chronic diseases.	1	1 Level 2
HE.912.C.1.7 (1.4 old)	Analyze how heredity and family history can impact personal health.	2	2 Level 2
<i>Reporting Category Total</i>		4	

Overall Percentage for Written Test: 100%

Overall Percentage for Performance Tasks: 0%