

HUMAN ANATOMY & PHYSIOLOGY

INSTRUCTIONAL PACING GUIDE

(DAYS BASED ON 90 MINUTE BLOCK)

| DATES TAUGHT | OBJECTIVES | SUGGESTED PACING | RESOURCES |
|---|---|------------------|---|
| 1ST NINE WEEKS | | | |
| I. The Basic Organization of the Human Body- Explore the organizational structure of the human from the molecular to the organism level. | | | |
| Lesson 1 | | | |
| | <p>A-1.1 Review laboratory safety rules, standards, procedures, safety symbols, safety video, lab formats, and safety contracts.</p> <p>A-1.2 Define various levels of structural of structural organization.</p> | 1 Week | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, pp.1-2 <p>Instructional Videos</p> <ul style="list-style-type: none"> Video-The Universe Within Videodisc-Atoms to Anatomy A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> Flashcards, diagrams or Internet images on levels of organization. Starting with the concept of atoms have students “build” the human body and discuss its organization as they proceed from level to level. Use charts, illustrations, videos, discs, and discussions to evaluate in order of increasing complexity the different levels of structural organization summarizing each level. Color an anatomical plate of levels of organization identifying each stage. <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |
| TEACHER CREATED ASSESSMENT | | | |
| Lesson 2 | | | |
| | <p>A-1.3 Describe the 8 functions that humans must perform to maintain life</p> | 2 days | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, pp.8-12 <p>Instructional Videos</p> <ul style="list-style-type: none"> Human Body: Pushing the Limits <p>Instructional Activities</p> <ul style="list-style-type: none"> Using clay or colored pencils/markers, students create a visual representation of interrelationships among body organ systems <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |
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Lesson 3

A-1.4 Describe the positive and negative feedback mechanisms and explain how they affect homeostasis. Develop scenarios of positive and negative feedback mechanisms and predict their effect on homeostasis.

3 days

Textbook /Course Resources:

- Essentials of Human Anatomy and Physiology, pp.12-14

Instructional Videos

- A.D.A.M. CD-ROM

Instructional Activities

- Develop scenarios of positive and negative feedback mechanisms and predict their effect upon homeostasis.
- Use discussion, charts, illustrations, diagrams, Internet images, videos, and discs to demonstrate the cause and effect relationship that results from negative feedback mechanisms and positive feedback mechanisms.
- Have students give and discuss examples of negative and positive feedback mechanisms.

Interactive Websites

- www.anatomyandphysiology.com
- www.innerbody.com

TEACHER CREATED ASSESSMENT

Lesson 4

A-1.5 Identify the major organ systems within the body and list the organs and functions of each system.

1 week

Textbook /Course Resources:

- Essentials of Human Anatomy and Physiology, pp.3-7

Instructional Videos

- A.D.A.M. CD-Rom
- Videotape-The Incredible Human Machine
- Streaming Video- The Human Body: Systems Working Together
- Videodiscs or tapes of different organ systems

Instructional Activities

- Construct a concept map of the major organ systems within the body and list the organs and functions of each system.
- Dissect a rat or a fetal pig to study the organ systems
- Utilize a human torso to illustrate the arrangement of the organs in the body.
- Use posters, diagrams, flash cards, Internet images and anatomical plates of the body systems to identify organs and their functions.
- Arrange cards of body organs into systems and discuss the function of each organ and system.
- Arrange a field trip to the USC School of Medicine to visit the Gross Anatomy Lab.

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| | | | <p>Observe and study the cadavers.</p> <ul style="list-style-type: none"> • Discuss the interrelationship between various organ systems, for example the muscular and skeletal system or the respiratory and circulatory system. • Color anatomical plates of the various systems identifying the organs in each. <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| Teacher Created Assessment | | | |
| Lesson 5 | | | |
| | <p>A-1.6 Illustrate the directional terms that are used to refer to the human body using the correct anatomical terminology.</p> | <p>1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, pp.14-18 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> • Describe and demonstrate the anatomical position. • Utilize human skeleton and or human torso to show Directional terms. • Lab Manual Activity • Utilize flashcards, anatomical plates, posters, Internet images, or diagrams to identify directional terms, body planes, regional terms, or body surfaces. • Label directional terms, body regions, planes, and sections of the human body. • Cut transverse and longitudinal sections, using sheep kidneys or bananas, and identify and study each. • Observe X-rays, MRI scans, Ultrasounds, and CT scans to locate different organs using anatomical directional terms. • Color anatomical plates of anatomical terminology. <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |

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| | <p>A-1.7 Illustrate the cavities in the human body and identify the organs contained within each.</p> | <p>2 weeks</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, pp.20-21 • Anatomy and Physiology Coloring Workbook, pp.8-13 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-Rom <p>Instructional Activities</p> <ul style="list-style-type: none"> • Construct a concept map to illustrate the cavities in the body and organs contained within each. • Utilize skeleton or human torso to demonstrate the body cavities and their organs. • Show diagrams, posters, flashcards, Internet Images, and anatomical plates to demonstrate locations of the body cavities and their organs. • Use a dissectible human torso to point out body cavities. • Dissect a rat or fetal pig to demonstrate the locations of the various body cavities and the organs that they contain. • Label a diagram of the abdominopelvic quadrants and regions and have students and discuss the organs found in each in the coloring book <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| Teacher Created Assessment | | | |
| Unit Assessment | | | |
| <p>II. Protection, Support, and Movement – Explore the integumentary, skeletal, and muscular systems, and relate the structures of the various parts to the functions they serve.</p> | | | |
| | <p>A-2.1 Identify and describe the components of integumentary system.</p> | <p>2 weeks</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 4 • Anatomy and Physiology Coloring Workbook, pp.59-69 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • View Streaming Video-Pushing the Limit-Sensation • Show videos or discs on the integumentary system and discuss. <p>Instructional Activities</p> <ul style="list-style-type: none"> • Investigate typical animal cells with a cell lab and cell diagrams. Label the various structures |

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| | | | <p>and define each.</p> <ul style="list-style-type: none"> • Lab Activity-Cell Anatomy & Physiology • Use a 3-D model of the skin to observe and identify the structures and components. • Relate the structure and components of the skin to their functions. • Observe several slides of the skin. Diagram, label, and analyze the observable skin structures and functions. • Discuss and summarize slides and transparencies of skin disorders. • Lab Activity-Epithelial and Connective Tissue • Relate the structure and function of the major layers of the skin, epidermis and dermis, and its parts and appendages. • Use the microscope to draw, identify, and analyze hair shafts, roots and hair follicles. • Identify and discuss the major regions of the nails. • Touch receptors lab. • Color three dimensional, anatomical plate of the integumentary system noting its various structures in the coloring book • Research disorders of the integumentary system and present <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| | <p>A-2.2 Explain the physiological mechanisms that make the functions of the integumentary system possible.</p> | <p style="text-align: center;">1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 4 • Anatomy and Physiology Coloring Workbook, pp.59-69 <p>Instructional Videos</p> <ul style="list-style-type: none"> • Physiology of the integumentary system • A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> • List functions of the integumentary system and the mechanisms that make the functions possible. • Discuss homeostatic imbalances of the skin and the consequences of these imbalances. <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| Unit Assessment | | | |

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| 2ND NINE WEEKS | | | |
| II. Protection, Support, and Movement – Explore the integumentary, skeletal, and muscular systems, and relate the structures of the various parts to the functions they serve. | | | |
| | A-2.3 Identify the bones of the skeletal system by their function, classification, and structure. | 1 week | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, Chapter 5 Anatomy and Physiology Coloring Workbook, pp.73-76 <p>Instructional Videos</p> <ul style="list-style-type: none"> A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> Utilize the human skeleton to label bones by their classification Use a microscope to differentiate between compact and spongy bone Utilize the coloring book <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |
| | A-2.4 Identify the bones of the axial skeleton and relate physiological mechanisms that help the skeletal system fulfill its functions. | 2 weeks | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, Chapter 5 Anatomy and Physiology Coloring Workbook , pp.77-84 <p>Instructional Videos</p> <ul style="list-style-type: none"> A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> Utilize the human skeleton to label bones in the axial skeleton Using molding clay create a 3D structure to represent to skull and include labeling Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |

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| | <p>A-2.5 Identify the bones of the appendicular skeleton and relate physiological mechanisms that help the skeletal system fulfill its functions.</p> | <p>1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 5 • Anatomy and Physiology Coloring Workbook, pp.85-93 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> • Utilize the human skeleton to label bones in the appendicular skeleton • Utilize the coloring workbook to color and label the bones in the appendicular skeleton <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| | <p>A-2.6 Compare and contrast major cartilages of the human body. A-2.7 Classify joints structurally and functionally.</p> | <p>1week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 5 • Anatomy and Physiology Coloring Workbook, pp.95-100 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> • Utilize the human skeleton to label cartilage and joints within the body • Utilize the coloring workbook • View photos or x-rays that depict patients with the loss of cartilage compared to that of a normal patient <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| Skeletal System Assessment | | | |
| | <p>A-2.8 Identify the various types of muscles of the body A-2.9 Explain the physiology of muscle contraction and analyze the effect of exercise on muscles.</p> | <p>2 weeks</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 6 • Anatomy and Physiology Coloring Workbook, pp.101-129 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology <p>Instructional Activities</p> <ul style="list-style-type: none"> • Utilize the human torso to identify the muscles of the upper body • Utilize the coloring workbook to color and label the muscles of the body • View and compare the 3 types of muscles under a microscope |

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| | | | <ul style="list-style-type: none"> • Using spaghetti and cling wrap, create models of the skeletal muscle fibers • Using molding clay create a 3D structure to represent major muscles of the body • Dissect an uncooked chicken wing to view muscles, tendons, ligaments, and joints <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| | <p>A-2.10 Investigate disorders of the skeletal and muscular system in terms of symptoms, problems associated, possible outcome and therapy treatment</p> | <p>2 weeks</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 6 • Anatomy and Physiology Coloring Workbook, pp.101-129 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology <p>Instructional Activities</p> <ul style="list-style-type: none"> • Assign each student or group a skeletal or muscular system disorder. Allow them to research and provide a rubric with clear expectations. Have the students present this information to their class. <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| <p>Unit Assessment</p> | | | |

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| 3RD NINE WEEKS | | | |
| III. Integration and Regulation-Investigate and compare the methods of body control by the nervous and endocrine system | | | |
| | A-3.1 Explore the organization of the nervous system as well as its structural and functional classification. | 1 week | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, Chapter 7 Anatomy and Physiology Coloring Workbook, pp.131-139 <p>Instructional Videos</p> <ul style="list-style-type: none"> A.D.A.M. CD-ROM Interactive Physiology Human Body: Pushing The Limits <p>Instructional Activities</p> <ul style="list-style-type: none"> Construct a concept map that depicts the organization of the nervous system Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |
| | A-3.2 Identify the anatomy and physiology of the central nervous system and differentiate its development, structure, and function. | 1week | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, Chapter 7 Anatomy and Physiology Coloring Workbook, pp.139-149 <p>Instructional Videos</p> <ul style="list-style-type: none"> A.D.A.M. CD-ROM Interactive Physiology Human Body: Pushing The Limits <p>Instructional Activities</p> <ul style="list-style-type: none"> Using a swim cap to represent the human brain, students can draw graphical representations of what is affected in the sensory and motor areas of the cerebral cortex Dissect a sheep brain. Identify the meninges, ventricles, general regions, and cranial nerves. Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |

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| | <p>A-3.3 Identify the anatomy and physiology of the peripheral nervous system and differentiate its development, structure, and function.</p> | <p>1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 7 • Anatomy and Physiology Coloring Workbook, pp.150-155 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology • Human Body: Pushing The Limits <p>Instructional Activities</p> <ul style="list-style-type: none"> • Utilize the human skeleton to label the spinal nerves • Create a poster that represents the anatomy of the autonomic nervous system. It should include the parasympathetic and sympathetic divisions and what organ/organ system is affected. • Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| | <p>A-3.4 Investigate the symptoms, causes, treatment, and diagnostic procedures of nervous system disorders.</p> | <p>1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 7 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology • Human Body: Pushing The Limits <p>Instructional Activities</p> <ul style="list-style-type: none"> • Assign students to a nervous system disorder. Have the student create a brochure to help their classmates better understand the disorder. Provide a rubric outlining the expectations. <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| <p>Nervous System Assessment</p> | | | |

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| | <p>A-3.5 Identify the major organs of the endocrine system and explain how these organs are affected.</p> | <p>1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 9 • Anatomy and Physiology Coloring Workbook, pp.181-190 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology • Human Body: Pushing The Limits <p>Instructional Activities</p> <ul style="list-style-type: none"> • Give students a blank human body representation in anatomical position. Have them use clay to make organs that are affected by the endocrine system and correctly place them on the body. • Construct feedback loops and/or concept maps that depict the effect of an increase or decrease in a particular hormone of the endocrine system. • Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| | <p>A-3.6 Examine congenital disorders of the endocrine system.</p> | <p>1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 9 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology • Human Body: Pushing The Limits <p>Instructional Activities</p> <ul style="list-style-type: none"> • Assign students into groups. Give them a case study with a patient and their symptoms to help them determine a diagnosis based on what they have learned on the endocrine system. <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| <p>Unit Assessment</p> | | | |

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| IV. Transportation-Investigate the structure and function of the cardiovascular system with an emphasis on the blood, heart, and the lymphatic system and attention to the immune response | | | |
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| | <p>A-4.1 Identify and describe the molecular and cellular components of blood.</p> | 1 week | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, Chapter 10 Anatomy and Physiology Coloring Workbook, pp.193-204 <p>Instructional Videos</p> <ul style="list-style-type: none"> A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> Create clay models of the development of blood cells Blood typing lab Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |
| | <p>A-4.2 Demonstrate an understanding of the heart and the flow of blood through the heart as well as the biochemical and physiological nature of the heart's functions.</p> | 2 weeks | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, Chapter 11 Anatomy and Physiology Coloring Workbook, pp.205-234 <p>Instructional Videos</p> <ul style="list-style-type: none"> A.D.A.M. CD-ROM Interactive Physiology <p>Instructional Activities</p> <ul style="list-style-type: none"> Dissect a sheep heart to identify the parts of a mammalian heart. Create a 3-D model of a heart using modeling clay. Arrange a tour of the heart hospital at Palmetto Health Richland. Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |
| Cardiovascular System Assessment | | | |

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| 4TH NINE WEEKS | | | |
| IV. Transportation-Investigate the structure and function of the cardiovascular system with an emphasis on the blood,heart,and the lymphatic system and attention to the immune response | | | |
| | A-4.3 Identify the major organs of the lymphatic system | 1 week | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 12 • Anatomy and Physiology Coloring Workbook, pp.235-258 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology <p>Instructional Activities</p> <ul style="list-style-type: none"> • Using human body graphic organizers in anatomical position, draw the distribution of lymphatic vessels. Use white molding clay to represent the distribution of lymph nodes. • Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| | A-4.4 Demonstrate an understanding of the immune response. | 1 week | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 12 • Anatomy and Physiology Coloring Workbook, pp.235-258 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology • Cancer Video <p>Instructional Activities</p> <ul style="list-style-type: none"> • Have students swab various areas of the school to see what bacteria can be growing. After finding out what the bacteria is, have the students research how the bacteria can affect our immune system. • Use a simulated ELISA kit for HIV and take students the process of testing while also discussing how the immune system is being affected. • Visit a local college where there is a microbiology lab (i.e. Columbia College) or hospital. • Utilize the coloring workbook |

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| | | | <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| Lymphatic System Assessment | | | |
| Unit Assessment | | | |
| V. ABSORPTION AND SECRETION- INVESTIGATE THE STRUCTURES OF THE BODY ASSOCIATED WITH THE ABSORPTION AND EXCRETION OF MATERIALS, FROM THE MOLECULAR, CELLULAR, ORGAN, AND SYSTEM LEVELS OF FUNCTION. | | | |
| | <p>A-5.1 Identify and observe the anatomy of each organ within the digestive and urinary system.</p> | <p>2 weeks</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 14-15 • Anatomy and Physiology Coloring Workbook, pp.277-323 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology • Super Size Me <p>Instructional Activities</p> <ul style="list-style-type: none"> • Dissect a fetal pig or cat to identify the organs of the digestive and urinary system • Use the human torso to identify and label the parts of a digestive system. • Have the students create clay models of the digestive system showing an accurate comparison of the small and large intestines. • Trace a particular food item through the digestive tract listing biochemical reactions, enzymes, and resultant substances formed. • Show the video super size me and relate how nutrition, metabolism, and body temperature and interrelated. • Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |

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| | <p>A-5.2 Explain the role of the urinary system in the body's waste management and explore the physiological basis for the elimination of water and salts through the skin and lungs, i.e. kidney filtration, reabsorption, and excretion.</p> | <p>1week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 15 • Anatomy and Physiology Coloring Workbook, pp.277-323 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM • Interactive Physiology <p>Instructional Activities</p> <ul style="list-style-type: none"> • Take a field trip to a local dialysis center or invite a nephrologist to speak to the class. • Have students monitor their daily fluid intake(water) for a week and compare it to normal values and see what problems this may cause • Acid/Base Lab-Have students measure how acidic or basic their drinks are. • Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| <p>Unit Assessment</p> | | | |
| <p>VI. REPRODUCTION, GROWTH, AND DEVELOPMENT-INVESTIGATE THE REPRODUCTIVE SYSTEM AND ITS ASSOCIATION WITH THE GROWTH AND DEVELOPMENT OF ORGANISMS</p> | | | |
| | <p>A-6.1 Identify the structures and related functions of the male and female reproductive systems.</p> | <p>1week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 16 • Anatomy and Physiology Coloring Workbook, pp.325-349 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> • Using modeling clay, create 3-D models of the male and female reproductive organs and label. • Utilize the coloring book <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |

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(DAYS BASED ON 90 MINUTE BLOCK)

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| | <p>A-6.2 Demonstrate an understanding of the hormonal regulation.</p> <p>A-6.3 Compare and contrast meiosis with mitosis and spermatogenesis and oogenesis</p> | <p>1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 16 • Anatomy and Physiology Coloring Workbook, pp.325-349 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> • Create timeline that depicts the menstrual cycle • Construct a concept map that compares mitosis and mitosis to spermatogenesis and oogenesis • Examine microscopic slides and construct drawings of spermatogenesis and oogenesis. • Utilize the coloring book <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| | <p>A-6.4 Indicate the duration and relate the major events at each stage of gestation</p> <p>A-6.5 Investigate congenital disorders as well as diseases of the male and female reproductive system, their physiological, biochemical, hormonal, chromosomal causes (if applicable), and impact on lives.</p> | <p>1 week</p> | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> • Essentials of Human Anatomy and Physiology, Chapter 16 • Anatomy and Physiology Coloring Workbook, pp.325-349 <p>Instructional Videos</p> <ul style="list-style-type: none"> • A.D.A.M. CD-ROM <p>Instructional Activities</p> <ul style="list-style-type: none"> • Create a timeline that depicts the major events at each stage of digestion. • Invite an OB/GYN or neonatal nurse to speak to the class. • Visit the children’s hospital at Palmetto Health Richland. • Utilize the coloring workbook <p>Interactive Websites</p> <ul style="list-style-type: none"> • www.anatomyandphysiology.com • www.innerbody.com |
| <p>UNIT ASSESSMENT</p> | | | |

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(DAYS BASED ON 90 MINUTE BLOCK)

| VII. RESPIRATION-INVESTIGATE THE FUNCTIONAL ANATOMY OF THE RESPIRATORY SYSTEM | | | |
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| | <p>A-6.6 Investigate the organs forming the respiratory passageways in descending order until the alveoli have been reached.</p> <p>A-6.7 Investigate disorders of the respiratory system</p> | 1 week | <p>Textbook /Course Resources:</p> <ul style="list-style-type: none"> Essentials of Human Anatomy and Physiology, Chapter 13 Anatomy and Physiology Coloring Workbook, pp.259-275 <p>Instructional Videos</p> <ul style="list-style-type: none"> A.D.A.M. CD-ROM Interactive Physiology <p>Instructional Activities</p> <ul style="list-style-type: none"> Use modeling clay to create and label the parts of the respiratory system. Use grapes to visually depict the respiratory bronchioles ,alveolar ducts, and alveoli View microspic slides or x-rays of patients with various respiratory diseases Utilize the coloring book <p>Interactive Websites</p> <ul style="list-style-type: none"> www.anatomyandphysiology.com www.innerbody.com |
| Unit Assessment | | | |
| Final Examination | | | |