

## **HUMAN ANATOMY AND PHYSIOLOGY LEARNING OBJECTIVES**

### **I. Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.**

1. The learner will engage in inquiry activities relating to the use of microscopes in the identification of tissues and cells.
2. The learner will engage in dissections to identify and discern structures in real or virtual specimens.
3. The learner will engage in inquiry activities for each body system.
4. The learner will engage in research regarding disorders/disease for each body system.
5. The learner will engage in actual research regarding the normal and abnormal function of body systems.
6. The learner will be able to interpret and discern anatomical sections and preparations.

### **II. Students, through the inquiry process, demonstrate knowledge of properties, forms, changes, and interactions of physical and chemical systems.**

7. The learner will gain an understanding of structural hierarchies on both a chemical and cellular level.
8. The learner will be able to identify the key processes involved in the transfer of energy from ingestion to digestion and relate these transfers to the overall function of metabolism.
9. The learner will develop an understanding of the chemical interactions involved with homeostasis and metabolism.

### **III. Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process of diversity of life, and how living organisms interact with each other and their environment.**

10. The learner will be able to identify the unique cells, tissues, and organs of the each body system.
11. The learner will be able to recognize the patterns and processes apparent in each body system with particular recognition of the feedback mechanisms within each system.
12. The learner will be able to relate all relevant structures to their individual function and to the overall function of each body system.

### **IV. Students, through the inquiry process, demonstrate knowledge of composition, structures, processes and interactions of Earth's systems and other objects in space.** *None purposefully written for this standard for Human Anatomy and Physiology*

### **V. Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, cultures, and societies.**

13. The learner is able to engage in library and online research regarding medical advances and their relationship to health issues.
14. The learner is able to discern between biased and unbiased research and utilize the best resources for research.
15. The learner will develop an understanding about medical issues, past and present, in our society.

### **VI. Students understand historical developments in science and technology.**

16. The learner understands the impact of medical research and developments upon society and their role in history.
17. The learner will develop an understanding regarding how inquiry has lead to medical developments.