

Unit 03: Anatomy and Physiology Integument

Content Area: **Science**
Course(s): **Generic Course**
Time Period: **Marking Period 1**
Length: **2 weeks**
Status: **Published**

Standards

[LS1.A: Structure and Function](#) (pp. 143-145, NRC, 2012)

- [Systems of specialized cells within organisms help them perform the essential functions of life. \(HS-LS1-1\)](#)
- [Multicellular organisms have a hierarchical structural organization, in which any one system is made up of numerous parts and is itself a component of the next level. \(HS-LS1-2\)](#)
- [Feedback mechanisms maintain a living system's internal conditions within certain limits and mediate behaviors, allowing it to remain alive and functional even as external conditions change within some range. Feedback mechanisms can encourage \(through positive feedback\) or discourage \(negative feedback\) what is going on inside the living system. \(HS-LS1-3\)](#)

SCI.9-12.HS-LS1-3	Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.
SCI.9-12.HS-LS1-2	Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
SCI.9-12.HS-LS1-1	Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins, which carry out the essential functions of life through systems of specialized cells.

Essential Questions

How do the skin and its components make up a complex organ that protects and interacts with other body systems?

Content / Skills

- Compare and contrast burn types
- Compare and contrast glands associated with skin
- Compare and contrast the structure and function of hair follicles and nails
- Describe the functions of skin
- List and describe the tissue types that compose the layers of the skin
- Label diagrams of the cross section of skin, layers of the epidermis, dermis and accessory organs