

# Unit 02: The Integument

Content Area: **Science**  
Course(s): **Anatomy/Physiology**  
Time Period: **October**  
Length: **12 periods**  
Status: **Published**

## Unit Overview

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- The skin is a protective covering, helps regulate body temperature, houses sensory receptors, synthesizes chemicals, and excretes wastes.

## Enduring Understandings

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- Skin cells, as well as other cells in the body, are constantly regenerating.
- Skin helps maintain homeostasis by performing various functions such as protection from environmental factors, temperature regulation, vitamin D synthesis, and acting as a sensory receptor.
- Skin is the body's largest organ.

## Essential Questions

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- How do the systems of the human body work independently and collectively to maintain internal homeostasis?
- Why are injuries associated with our main protection from the surrounding environment so potentially detrimental?
- Why do we have skin?
- Why does everyone's skin look different?

## Lesson Titles

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- Accessory organs of the skin (2 periods)
- Burns (1 period)
- Lab-Integumentary system (2 periods)
- Life-span changes (1 period)
- Regulation of body temperature (1 period)
- Skin and its tissues (3 periods)
- Skin color (1 period)
- Skin disorders (1 period)

## Standards/Indicators/Student Learning Objectives (SLOs):

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- Describe life-span changes in the integumentary system

- Describe the accessory organs associated with the skin
- Describe the structure of the layers of the skin
- Explain how skin helps regulate body temperature
- List the general functions of each layer of the skin
- Summarize the factors that determine skin color

9-12.HS-LS1-1.LS1.A                      Structure and Function

9-12.HS-LS1-1.LS1.A.1                      Systems of specialized cells within organisms help them perform the essential functions of life.

## **Career Readiness, Life Literacies & Key Skills**

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WRK.K-12.P.4                      Demonstrate creativity and innovation.

WRK.K-12.P.5                      Utilize critical thinking to make sense of problems and persevere in solving them.

WRK.K-12.P.8                      Use technology to enhance productivity increase collaboration and communicate effectively.

WRK.K-12.P.9                      Work productively in teams while using cultural/global competence.

## **Inter-Disciplinary Connections**

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LA.RST.11-12.3                      Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

LA.RST.11-12.4                      Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

LA.RST.11-12.8                      Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

LA.WHST.11-12.2.E                      Provide a concluding paragraph or section that supports the argument presented.

LA.WHST.11-12.9                      Draw evidence from informational texts to support analysis, reflection, and research.

HPE.2.1.12.C                      Diseases and Health Conditions

HPE.2.1.12.C.1                      Determine diseases and health conditions that may occur during one's lifespan and identify prevention and treatment strategies.

## **Instructional Strategies, Learning Activities, and Levels of Blooms/DOK**

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- Group Work
- Histology webquest
- Lab
- Note Taking/Discussion
- Powerpoint
- Research paper- skin disease

- Slide presentation
- Student Presentation
- Webquest
- You Tube

## **Modifications:**

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## **Alternative Assessments:**

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Performance tasks

Project-based assignments

Problem-based assignments

Presentations

Reflective pieces

Concept maps

Case-based scenarios

## **Benchmark Assessment**

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Skills-based assessment

Reading response

Writing prompt

Lab practical

## **ELL Modifications:**

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- Be flexible with time frames and deadlines
- Focus on domain specific vocabulary and keywords
- Group students
- Intentional scheduling/grouping with student/teacher who speaks the same language if possible

- Provide ELL students with multiple literacy strategies

## **IEP & 504 Modifications:**

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- allowing student to take notes in class for reinforcement but also providing a copy of notes to study from
- Focus on domain specific vocabulary and keywords
- providing study guides
- reducing homework length to just those most important for review
- rewording questions so that there are not higher level vocabulary within the question
- teaching the main ideas/concepts (limiting not needed details) to be taught and repeating them in several different ways over several different days

## **G&T Modifications:**

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- Additional reinforcement activities
- Inquiry based learning
- Student led/directed discussions

## **At Risk Modifications:**

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- Additional help during tutoring/Delsea One/Academic Enrichment
- Non-verbal redirection of behaviors
- Study guides

## **Formative Assessment**

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- Closure Activity
- Homework
- Lab Report
- Photos of burns
- Question of the day
- Skin model
- Teacher Observation of Student Activity
- Ticket out
- Turn to Partner
- Worksheet
- You tube clips

## Summative Assessment

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- Skin Quiz
- Skin Test

## Resources & Materials:

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- Compound Microscope
- Google classroom
- Skin Lab- Prepared Slides of the Integument
- Textbook

## Technology:

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- Chromebook
- <https://www.coursehero.com/file/26214389/Webquest-Histology-2-doc/>
- Internet
- Microscope

TECH.8.1.12

Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

TECH.8.1.12.A.CS1

Understand and use technology systems.

TECH.8.1.12.B

Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.

TECH.8.1.12.E.CS4

Process data and report results.