11th Grade HEALTH unit 2 Body Systems

Content Area: **Health & PE**
Course(s):
Time Period: **May**
Length: **3 Weeks**
Status: **Published**

Targeted Standards

2.2.12.N	Nutrition The balance of food intake and exercise is a vitally important component of nutritional wellness, and is tempered by factors like age, culture, lifestyle, and family history.
2.2.12.N.1	Compare and contrast the nutritional trends, eating habits, body image, and the impact of marketing foods on adolescents and young adults nationally and worldwide.
2.2.12.N.2	Determine the relationship of nutrition and physical activity to weight loss, gain, and maintenance.
2.2.12.N.3	Analyze the unique contributions of each nutrient class (e.g., fats, carbohydrates, protein, water, vitamins, minerals) to one's health and fitness.
2.2.12.N.4	Implement strategies and monitor progress in achieving a personal nutritional health plan.
2.2.12.N.5	Research present trends in plant based and organic food choices and industries that have shown an impact on lowering heart, cancer, diabetes, and other diseases.

Rationale & Transfer Goals

This unit is designed to help students understand how their body operates. Looking into how our body uses different systems will help students become aware of how to take care of their bodies and avoid harmful behaviors.

Enduring Understandings - What are the most essential conclusions that students should be guided towards throughout this unit?

- Anatomy and Kinesiology of skeletal system.
- Structure and function of muscular system.
- Pathway of breaking down food.
- Pathway of oxygen entering the body.

Essential Questions - What are the questions that will guide critical thinking

about the content in this unit? Essential Questions should be thought starters toward the enduring understandings.

- Why are bones important to humans?
- What exercises strengthen muscles and bones?
- What would we be like without bones?
- How does nutrition affect your muscles and bones?
- How do the muscles move the body?
- Why is oxygen so important?
- Do we breakdown fats the same way as protein or carbohydrates?
- How can you prevent injuries to muscular, skeletal, and nervous systems?

Content/Objectives

Content - What students will know

- Personal Health Care
- Skeletal, Muscular, Nervous systems
- Cardiovascular, Respiratory, Digestive systems.

Skills - What students will be able to do

Identify bones and what each does.

• Demonstrate how muscles move the body.

• identify organs in the digestive system.

Instructional Activites

Activities/Strategies - How we teach content and skills

How we teach content and skills

Bone Shape; looking at shapes of bones to determine function.

What is the function; looking at diagrams identify organs and discuss what each does.

Packet on cardiovascular exercise.

Evidence (Assessments) - How we know students have learned

Identification

Formative: Sample Assessment Item

Students will be given different diagrams and asked to identify organs making that system up.

19 Standards Assessed

Tests and quizzes

Formative: Written Test

written exam on content of systems.

19 Standards Assessed

Spiraling for Mastery - Where does this unit spiral back to other units or previous years?

Content or Skill for this Unit

- Note taking
- Staying healthy takes knowledge, a plan, and practicing healthful behaviors
- Proper nutrition benefits
- Prevention techniques for overall health

Spiral Focus from Previous Unit

•Effective communication

•Literacy activities

•Vocabulary

•Following overall health plan

•Goal setting

*Benefits of exercises and

proper nutrition

Instructional Activity

- Health literacy activities
- Group scenarios
- Projects
- Key terms/Diagrams
- Creating T-charts
- Lesson Assessments
- Word Webs – note taking
- Health Plan

- Video - response

21st Century Skills - What are the 21st Century Skills that are a part of this unit?

- • 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
- • 9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
- • 9.4.8.GCA.1: Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).
- 9.4.12.CI.1: Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
- • 9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
- 9.4.5.DC.5: Identify the characteristics of a positive and negative online identity and the lasting implications of online activity.

Interdisciplinary Connections - How does this content impact the following groups

ELA

ELA

NJSLSA.R1. Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

RH.9-10.7. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text, to analyze information presented via different mediums.

RST.9-10.2. Determine the central ideas, themes, or conclusions of a text; trace the text’s explanation or

depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.

RST.9-10.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.

RST.9-10.7. Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

NJSLSA.W4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.

- standards supporting written and print communication across all areas of the course

MATH

Math
Creating Equations A -CED
A. Create equations that describe numbers or relationships. 1. Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.

Modeling with Geometry G-MG
A. Apply geometric concepts in modeling situations. 1. Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).

Interpreting Categorical and Quantitative Data S-ID N-ILN
A. Summarize, represent, and interpret data on a single count or measurement variable
1. Represent data with plots on the real number line (dot plots, histograms, and box plots).

Making Inferences and Justifying Conclusions S-IC
B. Make inferences and justify conclusions from sample surveys, experiments, and observational studies math processes related to fitness and health data, geometry in gameplay, and quantitative representations

Science

Science

HS-LS1-3. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. [Clarification Statement: Examples of investigations could include heart rate response to exercise]

HS-LS2-3. Construct and revise an explanation based on evidence for the cycling of matter and flow of energy

in aerobic and anaerobic conditions.

HS-LS2-8. Evaluate evidence for the role of group behavior on individual and species' chances to survive and reproduce.

- Connections to study of exercise physiology and associated anatomy
- Basic understanding of communicability of diseases in discussion of wellness

Key Resources

Glencoe Health

www.Glencoe.com

www.pecentral.com