

HS Applied Anatomy & Kinesiology for Dance GSE Standards



# **Creating**

#### DHSAAK.CR.1 Demonstrate an understanding and apply knowledge of kinesiology, somatics, and anatomy in movement.

- a. Explain and demonstrate the use of self-monitoring methods to refine and improve alignment and technical skills.
- b. Define, describe, and execute functions of anatomy as they relate to dance styles and how preparation for different movement styles differ.
- c. Analyze and apply principles of injury prevention for dance to personal practices in preparing for dance class and performance.
- d. Develop a dance class or training session based on the components of fitness and injury prevention guidelines for safe physical activity.
- e. Identify and relate physical activity guidelines for health and fitness according to both the Surgeon General and the American College of Sports Medicine (e.g. warm-up, fitness phase, cool down).

## **Performing**

## DHSAAK.PR.1 Identify and demonstrate movement elements, skills, and terminology in dance.

- a. Demonstrate an understanding of basic dance terminology and technique.
- b. Understand kinesthetic awareness through body parts and isolations, connecting the body to one's kinesphere.
- c. Examine the kinesthetic process used to transfer weight, change direction, and maintain balance.
- d. Analyze the use of the elements of dance in relation to kinesthetic awareness and muscle function.

## DHSAAK.PR.2 Demonstrate an understanding of the relationship between dance as a form of physical activity, health, well-being, and quality of life.

- a. Identify the 5 components of fitness (e.g. cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, body composition).
- b. Identify and demonstrate proper progressions and regressions.
- c. Demonstrate dynamic and static flexibility.
- d. Demonstrate knowledge in preparing the body through using opposing muscle groups and concentric, isometric, and eccentric muscular contractions.

### DHSAAK.PR.3 Identify and demonstrate the components of muscular fitness.

- a. Identify and demonstrate functional movement training for stability and mobility (e.g. proper alignment).
- b. Identify and demonstrate knowledge in weights and calisthenics that manipulate the body's levers to progress intensity for



muscular strength and endurance progressions.

- c. Identify and demonstrate proper performance training exercises (e.g. jumps, rotary power).
- d. Identify and demonstrate aerobic-based training, aerobic efficiency, anaerobic endurance, and anaerobic power.

## Responding

# DHSAAK.RE.1 Understand and describe how dance as exercise influences the cardiovascular system, skeletal system, and muscular system for both health and performance.

- a. Explain how the skeletal structure provides support and protection for tissues, and functions with the muscular system to make movements possible.
- b. Recognize all of the movements of the primary joints, the plane and axis in which they occur, and the muscles which produce these actions.

### DHSAAK.RE. 2 Describe, understand, and apply energy system principles (bioenergetics) to the movements of dance.

- a. Identify the 3 primary metabolic systems (e.g. ATP-PC system, anaerobic glycolysis system, aerobic glycolysis system).
- b. Understand the limitations for energy delivery and utilization in the body through the study of the 3 primary metabolic systems.
- c. Identify neuromuscular foundations of movement, including motor units, neuromuscular junctions, action potentials, and the sequence of those events to produce movements.
- d. Explain motion analysis by identifying muscles that produce movement under analysis, and the type of contraction that occurs (e.g. concentric, eccentric, isometric).

## **Connecting**

#### DHSAAK.CN.1 Recognize connections between dance and wellness.

- a. Describe the ways that dance promotes strength, health, physical safety, and reduced risk of injury, and employ appropriate strategies for treating, preventing, and recovering from dance injuries.
- b. Assess consequences of personal actions, and commitment and discipline necessary to achieve personal goals in dance.
- c. Identify bones and muscle groups, and describe the ways that alignment, flexibility, and strength contribute to the body's range of motion.
- $\mbox{d.}$  Identify and explain extrinsic and intrinsic motivation.



## DHSAAK.CN.2 Demonstrate an understanding of dance as it relates to other areas of knowledge.

- a. Identify and explore various dance related professions (e.g. sports medicine, dance therapy).
- b. Explore the use of media and technology to research the relationship between dance and science.
- c. Research and present one social behavior theory (e.g. Transtheoretical Model of Behavioral Change, Health Belief Model, Social Cognitive Theory, Social Ecological Model) and identify how it applies to dance.