

Spring 2021 Kinesiology Capstone Presentations

*Capstone presentations were recorded this semester due to covid social distancing requirements. Each student selected two Demonstration of Knowledge and Evidence (DKE) Standards to present their knowledge and application.

Student Name	DKE 1	DKE 2
Grace Blair	Ability to discuss inclusionary strategies and the importance of inclusion for individuals with a disability.	Knowledge of the effects of diet and exercise as methods for modifying body composition.
Camryn Brown	Knowledge of the myths and consequences associated with inappropriate weight loss methods (e.g., fad diets, dietary supplements, over-exercising, starvation diets).	Knowledge of the effects of diet and exercise as methods for modifying body composition.
Paphawee Chungtrukool	Knowledge of stress management and relaxation techniques (e.g., progressive relaxation, guided imagery, massage therapy, mindfulness, social support and social relationships, time outdoors) and how to appropriately incorporate each to reduce the negative effects of the stress response.	Knowledge of the kinematics and kinetics of gait and ability to describe the biomechanical principles that underlie gait abnormalities (Select 1: waddling gait, scissor gait, hemiplegia gait, parkinsonian gait).
Dale Craft	Knowledge of physical barriers that could hinder involvement in physical activities for individuals with a disability.	Knowledge of the kinematics and kinetics of gait and ability to describe the biomechanical principles that underlie gait abnormalities (Select 1: waddling gait, scissor gait, hemiplegia gait, parkinsonian gait).
Haven Dang	Knowledge of how the type of practice (e.g., whole/part) and the length of spacing of practice (massed distributed)	Knowledge of fuel (carbohydrates and fat) utilization during aerobic and anaerobic exercise and the

	influence the learning and performance of motor skills.	role of the endocrine system in fuel utilization.
Rache Dixon	Knowledge of the myths and consequences associated with inappropriate weight loss methods (e.g., fad diets, dietary supplements, over-exercising, starvation diets).	Knowledge of fuel (carbohydrates and fat) utilization during aerobic and anaerobic exercise and the role of the endocrine system in fuel utilization.
Kurt Ertel	Ability to analyze and discuss how practice methodology impacts the performance and retention of motor skills (e.g., blocked, serial, random, constant, variable, etc).	Ability to describe the aerobic and anaerobic energy systems in the performance of various physical activities (select 2 physical activities per energy system).
Amy Flores	Knowledge of personal, social, environmental and cultural barriers to exercise adherence and compliance (e.g., time management, body image concerns, fear of musculature, significant others, injury, fear, lack of knowledge, weather).	Knowledge of the heart rate, stroke volume, cardiac output, and blood pressure responses during sub-maximal and maximal exercise and ability to describe the underlying physiological mechanisms for such responses.
Heze Goodwin	Knowledge of personality traits (Big 5) that may enhance program adherence, safety, and success.	Knowledge of the heart rate, stroke volume, cardiac output, and blood pressure responses during sub-maximal and maximal exercise and ability to describe the underlying physiological mechanisms for such responses.
Avery Grant	Knowledge of body image and the ability to explain positive and negative body image, outlining the potential consequences of developing a negative body image.	Knowledge of the kinematics and kinetics of gait and ability to describe the biomechanical principles that underlie gait abnormalities (Select 1: waddling gait, scissor gait, hemiplegia gait, parkinsonian gait).
Adrienne Gulley	Knowledge of the myths and consequences associated	Knowledge of common nutritional ergogenic aids,

	with inappropriate weight loss methods (e.g., fad diets, dietary supplements, over-exercising, starvation diets).	the purported mechanism of action, physiological benefits, and any risks associated with use (Select 1: pre-event carbohydrate supplementation, during an event carbohydrate supplementation, creatine, steroids, caffeine).
Ryan Hedge	Knowledge of the obesity myth (and related terms associated with the “anti-fat movement”) and the ability to describe the effect of body size as well as the type, amount and distribution of fat on health.	Knowledge of the kinematics and kinetics of gait and ability to describe the biomechanical principles that underlie gait abnormalities (Select 1: waddling gait, scissor gait, hemiplegia gait, parkinsonian gait).
Kylee Johnson	Knowledge of personality traits (Big 5) that may enhance program adherence, safety, and success.	Knowledge of importance of hydration before, during, and after exercise.
Ashleigh Jones	Knowledge of how the type of practice (e.g., whole/part) and the length of spacing of practice (massed distributed) influence the learning and performance of motor skills.	Ability to adapt frequency, intensity, duration, mode, and progression in exercise programs for patients with musculoskeletal problems.
Lauren Kaija	Knowledge of behavior change models and theories and appropriate behavior strategies to enhance exercise and health behavior change for each.	Ability to adapt frequency, intensity, duration, mode, and progression in exercise programs for patients with controlled chronic disease (Select 1).
Sophie Kass	Knowledge of motor learning theories of skill acquisition (e.g., open loop, closed loop, schema, ecological theory, hierarchy of motor skills) (Select 2).	Knowledge of common nutritional ergogenic aids, the purported mechanism of action, physiological benefits, and any risks associated with use (Select 1: pre-event carbohydrate supplementation, during an event carbohydrate

		supplementation, creatine, steroids, caffeine).
Joey Knox	Knowledge of stress management and relaxation techniques (e.g., progressive relaxation, guided imagery, massage therapy, mindfulness, social support and social relationships, time outdoors) and how to appropriately incorporate each to reduce the negative effects of the stress response.	Knowledge of fuel (carbohydrates and fat) utilization during aerobic and anaerobic exercise and the role of the endocrine system in fuel utilization.
Noelle Kock Wah Ng	Knowledge of behavior change models and theories and appropriate behavior strategies to enhance exercise and health behavior change for each.	Knowledge of the kinematics and kinetics of gait and ability to describe the biomechanical principles that underlie gait abnormalities (Select 1: waddling gait, scissor gait, hemiplegia gait, parkinsonian gait).
Jaeden Koyen	Knowledge of the myths and consequences associated with inappropriate weight loss methods (e.g., fad diets, dietary supplements, over-exercising, starvation diets).	Knowledge of importance of hydration before, during, and after exercise.
Jorie Lambert	Knowledge of stress management and relaxation techniques (e.g., progressive relaxation, guided imagery, massage therapy, mindfulness, social support and social relationships, time outdoors) and how to appropriately incorporate each to reduce the negative effects of the stress response.	Ability to describe the aerobic and anaerobic energy systems in the performance of various physical activities (select 2 physical activities per energy system).
Julia Lemas	Knowledge of body image and the ability to explain positive and negative body image, outlining the potential	Knowledge of the kinematics and kinetics of gait and ability to describe the biomechanical principles that

	consequences of developing a negative body image.	underlie gait abnormalities (Select 1: waddling gait, scissor gait, hemiplegia gait, parkinsonian gait).
Jacob Mizrahi	Ability to analyze and discuss how practice methodology impacts the performance and retention of motor skills (e.g., blocked, serial, random, constant, variable, etc).	Knowledge of the primary action and joint range of motion for each major muscle group (Select 2 major upper body and 2 major lower body muscle groups) and ability to prescribe 3 different exercises per muscle group.
Liam Nabors	Knowledge of different types, amounts and timing of feedback and the ability to use feedback to optimize behavior and/or performance.	Knowledge of common nutritional ergogenic aids, the purported mechanism of action, physiological benefits, and any risks associated with use (Select 1: pre-event carbohydrate supplementation, during an event carbohydrate supplementation, creatine, steroids, caffeine).
Brianna O'Malley	Knowledge of the obesity myth (and related terms associated with the "anti-fat movement") and the ability to describe the effect of body size as well as the type, amount and distribution of fat on health.	Ability to describe the aerobic and anaerobic energy systems in the performance of various physical activities (select 2 physical activities per energy system).
Jonah Pellett	Ability to analyze and discuss how practice methodology impacts the performance and retention of motor skills (e.g., blocked, serial, random, constant, variable, etc).	Knowledge of the primary action and joint range of motion for each major muscle group (Select 2 major upper body and 2 major lower body muscle groups) and ability to prescribe 3 different exercises per muscle group.
Michael Penkman	Knowledge of motor learning theories of skill acquisition	Ability to describe the aerobic and anaerobic energy

	(e.g., open loop, closed loop, schema, ecological theory, hierarchy of motor skills) (Select 2).	systems in the performance of various physical activities (select 2 physical activities per energy system).
Michaela Peterson	Knowledge of body image and the ability to explain positive and negative body image, outlining the potential consequences of developing a negative body image.	Knowledge of nutritional factors related to the female athlete triad syndrome (i.e., eating disorders, menstrual cycle abnormalities, and osteoporosis).
Adan Pizana	Knowledge of the myths and consequences associated with inappropriate weight loss methods (e.g., fad diets, dietary supplements, over-exercising, starvation diets).	Knowledge of the kinematics and kinetics of gait and ability to describe the biomechanical principles that underlie gait abnormalities (Select 1: waddling gait, scissor gait, hemiplegia gait, parkinsonian gait).
Casey Rebelez	Knowledge of physical barriers that could hinder involvement in physical activities for individuals with a disability.	Ability to adapt frequency, intensity, duration, mode, and progression in exercise programs for patients with musculoskeletal problems.
Alex Shannon	Knowledge of personal, social, environmental and cultural barriers to exercise adherence and compliance (e.g., time management, body image concerns, fear of musculature, significant others, injury, fear, lack of knowledge, weather).	Knowledge of environmental factors as they relate to the safe participation (e.g., outdoor, indoors, flooring, temperature, space, lighting, room size, ventilation, equipment layout).
Jordan Smith	Knowledge of motor learning theories of skill acquisition (e.g., open loop, closed loop, schema, ecological theory, hierarchy of motor skills) (Select 2).	Ability to describe the aerobic and anaerobic energy systems in the performance of various physical activities (select 2 physical activities per energy system).
Ashley Starke	Knowledge of physical barriers that could hinder involvement in physical	Knowledge of fuel (carbohydrates and fat) utilization during aerobic and anaerobic exercise and the

	activities for individuals with a disability.	role of the endocrine system in fuel utilization.
Emily Stuth	Knowledge of how the type of practice (e.g., whole/part) and the length of spacing of practice (massed distributed) influence the learning and performance of motor skills.	Knowledge of fuel (carbohydrates and fat) utilization during aerobic and anaerobic exercise and the role of the endocrine system in fuel utilization.
Sidnee Sutherland	Knowledge of various design and measurement variables related to skill acquisition, performance curves and discuss the various reasons why performance frequently levels off.	Knowledge of the heart rate, stroke volume, cardiac output, and blood pressure responses during sub-maximal and maximal exercise and ability to describe the underlying physiological mechanisms for such responses.
Christina Trang	Knowledge of body image and the ability to explain positive and negative body image, outlining the potential consequences of developing a negative body image.	Knowledge of the kinematics and kinetics of gait and ability to describe the biomechanical principles that underlie gait abnormalities (Select 1: waddling gait, scissor gait, hemiplegia gait, parkinsonian gait).
Torrin Trowbridge	Knowledge of conflict prevention and ability to describe basic conflict resolution techniques and communication techniques as it relates to conflict resolution (e.g., active listening, mirroring, reflection).	Ability to describe modifications in exercise prescriptions and ability to integrate equipment into effective group exercise instruction for individuals with physical or intellectual disability.
Reilly Webster	Knowledge of behavior change models and theories, and appropriate behavior strategies to enhance exercise and health behavior change for each.	Knowledge of the heart rate, stroke volume, cardiac output, and blood pressure responses during sub-maximal and maximal exercise and ability to describe the underlying physiological mechanisms for such responses.

Hannah Weidenbach	Knowledge of different types, amounts and timing of feedback and the ability to use feedback to optimize behavior and/or performance.	Knowledge of the primary action and joint range of motion for each major muscle group (Select 2 major upper body and 2 major lower body muscle groups) and ability to prescribe 3 different exercises per muscle group.
Kelton Williams	Knowledge of specific techniques from self-determination theory, attribution theory, motivational theory, achievement motivation and competence motivation theory to enhance motivation.	Knowledge of components and characteristics of an exercise session (warm-up, cool-down, music) and ability to create a safe and effective experience for participants considering various group fitness class formats, objectives and participants.