Human Kinetics
Fitness for Life
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Grade 9

Students in grade nine complete the transition from modified versions of movement forms to more complex applications across all types of physical activities. This may include outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, individual performance activities, and games and sports (net/wall, striking/fielding, and goal/target). Students demonstrate the ability to use basic skills, strategies, and tactics in a variety of lifetime physical activities. Students demonstrate more specialized knowledge in identifying and applying key movement concepts and principles. Students will explain the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease. They self-assess their skill performance and develop a personal physical activity program aimed at improving motor skills, movement patterns, and strategies essential to performing a variety of physical activities. They apply their understanding of personal fitness to lifelong participation in physical activity. Students demonstrate independence in making choices, respecting others, avoiding conflict, resolving conflicts appropriately, and using elements of fair play and ethical behavior in physical activity settings. Students demonstrate the knowledge, skills, and abilities required to plan for and improve components of fitness and achieve and maintain a health-enhancing level of personal fitness.

Motor Skill Development
9.1
The student will perform all basic movement skills and demonstrate movement and biomechanical principles in a variety of activities that may include outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, individual performance activities, and games and sports (net/wall, striking/fielding, and goal/target(s)).

1. a) Demonstrate proficiency and refinement in locomotor, non-locomotor, and manipulative skills through appropriate activities (e.g., outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, individual performance activities, games and sports [net/wall, striking/fielding, and goal/target]).	pp. 11-16, 37-42, 57-60, 69, 81, 90, 96-99, 100-101, 108, 119-123, 133, 1143, 144-147, 150, 161-162, 172, 176-180, 182-183, 184-185, 186-192, 210-217, 227-240, 242, 251-257, 280, 282-285, 292-297, 327-333, 437-441, 443-449, 463-467
2. b) Design, implement, evaluate, and modify a practice plan for a self-selected skill, to include the motor learning process of analysis of performance; application of principles of movement and training; goal setting; and improvement of personal skills through practice, correction, practicing at a higher level, and reassessment.	pp. 9, 10-12, 13-15, 19-22, 23-24, 28-29, 34-35, 40-41, 42-43, 44, 46-49, 50, 107-108, 135-142, 145-150, 154, 157-163, 164-165, 166-170, 171, 172, 175-182, 189-195, 198, 201-208, 211-219, 273-277, 281

3. c) Apply the concepts and principles of levers, force, motion, and rotation in a variety of activities.	pp. 11-16, 62, 106-107, 144-147, 190, 210-217, 227-240, 248-250, 249, 438-441, 443-449
4. d) Apply physiological principles of warm-up, cool down, overload, specificity, and progression.	pp. 8-9, 26, 43-45, 47, 79, 93-95, 96-99, 106-107, 140, 144-147, 172, 185, 186-192, 203-205, 218-226, 287-291
5. e) Apply biomechanical principles of balance, energy, and types of muscle contractions to a variety of activities.	pp. 11-16, 62, 106-107, 144-147, 184-185, 190, 205-208, 210-217, 227-240, 248-250, 249, 437-441, 443-449, 452
6. f) Demonstrate competency in one or more specialized skills in health-related fitness activities.	pp. 19-20, 33-35, 43-47, 163-169, 172, 175-180, 181, 182-183, 186-192, 208-209, 210-216, 218-224, 227-240, 274-281, 395-398, 402-403
Anatomical Basis of Movement **9.2** The student will explain the structures and functions of the body and how they relate to and are affected by human movement.	
1. a) Explain and apply selected scientific principles, to include physiological (warm-up, cool down, overload, specificity, and progression) and biomechanical (levers, types of muscle contractions, and force) that aid in the improvement of movement skills.	pp. 8-9, 11-16, 26, 43-45, 47, 62, 79, 93-95, 96-99, 106-107, 140, 144-147, 172, 184-185, 186-192, 203-205, 218-226, 287-291, 437-441, 443-449, 452
2. b) Analyze and evaluate proficient and efficient movement in relation to how movement is directed, to include the type of muscle action that directs a movement (concentric, eccentric, and isometric), the direction the body part moves relative to its joints (abduction, adduction, flexion, and extension), and planes of movement.	pp. 4-7, 57-60, 62-63, 100-101, 119-123, 127-130, 202-209, 211-217, 218-226, 227-240, 242, 251-257, 276-281, 292-297, 437-441, 443-449, 452
3. c) Apply the concepts and principles of the body's metabolic response to short- and long-term physical activity.	pp. 4-5, 10, 31, 96, 97-99, 102-104, 137-142, 144-147, 175-183, 186-192, 303-311, 317-323, 327-333, 336-339, 365-372, 373-376, 377-383, 384-385, 386, 437-441
4. d) Explain the body's response to the principles of specificity, overload, and progression (SOP) in relation to frequency, intensity, time, and type of exercise (FITT).	pp. 93-96, 112, 165-169, 204-205, 280-281
5. e) Explain the anaerobic respiration (ATP-PC and Lactic Acid System) and aerobic respiration systems used for energy during activity.	pp. 181
6. f) Analyze movement performance, and utilize feedback to learn or to improve the movement skills of self and others.	pp. 116-118, 131-132

Fitness Planning
9.3
The student will evaluate current fitness behaviors and demonstrate achievement and maintenance of a health-enhancing level of personal fitness by designing, implementing, self-assessing, and modifying a personal fitness program.

1. a) Demonstrate program-planning skills by assessing and analyzing personal fitness levels, setting goals, devising strategies, making timelines for a personal physical fitness plan, and evaluating the components and progress of the personal fitness plan.	pp. 61-66, 144-147, 150, 186-192, 195, 265-268, 270, 286-291, 299, 327-333, 342
2. b) Apply the FITT (frequency, intensity, time, type) principle and other principles of training such as overload, specificity, and progression, in accordance with personal goals to the personal fitness plan.	pp. 93-99, 112-113, 140, 165-169, 204-205, 218-226, 278
3. c) Explain the characteristics, including scientific principles and concepts, of safe and appropriate muscular-stretching, muscular-strengthening, and cardiorespiratory exercise programs to improve the health-related components of fitness.	pp. 12, 38-41, 57-60, 98, 201-209, 210-217, 218-226, 227-240, 242, 245-248, 249, 250, 251-260, 264-268, 270, 279-281
4. d) Explain the relationship between heart rate, training zones, and exercise intensity, to include measures (e.g., heart rate monitors, pedometers, accelerometers) and appropriate training zones to meet exercise and personal fitness goals.	pp. 93-95, 106-107, 130, 141-142, 154, 157, 165-169, 172
5. e) Demonstrate appropriate techniques for resistance-training activities, machines, and/or free weights.	pp. 210-212, 219-223, 227-231, 232-240
6. f) Calculate resting heart rate, target heart rate, and blood pressure.	pp. 83, 128-129, 154, 165-166, 168-169, 172
7. g) Identify types of strength exercises (isometric, concentric, eccentric) and stretching exercises (static, proprioceptive neuromuscular facilitation, dynamic) for personal fitness development (e.g., strength, endurance, range of motion).	pp. 206-207, 213-217, 218-226, 237-240, 245-248, 249, 250, 251-255, 273-281, 282-285, 286-291, 292-297
8. h) Define and describe terms and activities associated with fitness, to include set, repetition, isometric, isotonic, isokinetic, core, upper body, and lower body exercises.	pp. 201-209, 210-217, 218-226, 227-240, 242, 245-250, 251-257, 258-260, 265-268, 270, 273-281, 282-285, 286-291, 292-298

Social Development
9.4
The student will explain and demonstrate the skills needed to be safe, responsible, and respectful in all physical activity settings.

1. a) Identify and demonstrate proper etiquette, respect for others, integrity, and teamwork while engaging in a variety of activities.	pp. 311, 322-333, 340-341, 434, 450-451, 455-460, 463-467, 468, 469
2. b) Explain the impact of sports and activities in developing respect for the unique characteristics, differences and abilities of peers.	pp. 311, 322-333, 340-341, 434, 450-451, 455-460, 463-467, 468, 469
3. c) Apply conflict-resolution skills in physical activity settings.	pp. 455-460, 468-469
4. d) Identify an opportunity for social support in a self-selected physical activity.	pp. 455-460, 462-467, 469
5. e) Apply communication skills and strategies that promote positive team/ group dynamics.	pp. 455-460, 461, 463-467, 468, 469
6. f) Apply problem-solving and critical-thinking skills in physical activity settings, both as an individual and in groups.	pp. 34-35, 48-49, 61-64, 65, 66, 67-68, 106-107, 117-118, 144-147, 298, 327-333, 353-357, 358-359, 373-376, 378-380, 395-398, 428, 461
7. g) Apply best practices for participating safely in physical activity, exercise, and dance (e.g., injury prevention, proper alignment, hydration, use of equipment, implementation of rules, sun protection).	pp. 73-79, 124-130, 186-192, 221, 409
8. h) Analyze and compare psychological benefits derived from various physical activities (e.g., decreased stress and anxiety, increased self-esteem, increased mental alertness, improved mood).	pp. 6, 30-31, 32-33, 117-118, 170-171, 336-339, 340-341, 393, 395-398, 402-403, 412, 413, 418, 450-451, 455-460, 468

Energy Balance

9.5

The student will explain the importance of energy balance and evaluate current caloric intake and caloric expenditure to maintain optimal health and prevent chronic disease.

a) Explain the body's physiological response to sugar, sodium, and fat.	pp. 366-372, 379-380
b) Assess and analyze current energy balance, to include intake and expenditure, activity levels, food choices, and amount of sleep.	pp. 96, 99, 317-324, 374-376, 386
c) Explain body composition, using body mass index (BMI) and other measures, the variety of body types, and healthy body weight.	pp. 21, 80-81, 303-316
d) Design and implement a plan to maintain an appropriate energy balance for a healthy, active lifestyle, to include intake, expenditure (levels of intensity), and sleep.	pp. 96, 99, 317-324, 374-376, 386