



ACSM-CPT Crosswalk

2022 Outline

I. Initial Client Consultation and Assessment

A. Provide documents and clear instructions to the client in preparation for the initial interview.

1. Knowledge of:
 - a. the components of and preparation for the initial client consultation
 - b. the necessary paperwork to be completed by the client prior to the initial client interview

2. Skill in
 - a. effective communication
 - b. utilizing a variety of communication channels (email, social media)

B. Interview the client to gather and provide pertinent information prior to fitness testing and program design.

1. Knowledge of:
 - a. the components and limitations of a health/medical history, preparticipation screening, informed consent, trainer-client contract and organizational policies and procedures
 - b. the use and order of medical clearance for exercise testing and program participation
 - c. health behavior modification theories and strategies
 - d. orientation procedures, including equipment utilization and facility layout

2024 Outline

I. Initial Client Consultation and Assessment

A. Provide documents and clear instructions to the client in preparation for the initial interview.

1. Knowledge of:
 - a. the components of and preparation for the initial client consultation
 - b. the necessary paperwork to be completed by the client prior to the initial client interview

2. Skill in
 - a. effective written and verbal communication
NOTE: expanded with detail
 - b. using a variety of communication channels (for example, email, text, phone, social media)
NOTE: expanded with detail

B. Interview the client to gather and provide pertinent information prior to fitness testing and program design.

1. Knowledge of:
 - a. the components and limitations of a health/medical history, preparticipation screening, informed consent, trainer-client contract and organizational policies and procedures
 - b. the use and order of medical clearance for exercise testing and program participation
 - c. health behavior modification theories and strategies

2. Skill in
a. obtaining and securing health/medical history, medical clearance and informed consent

C. Review and analyze client data to identify risk, formulate a plan of action and conduct physical assessments.

1. Knowledge of:
a. risk factors for cardiovascular disease
b. signs and symptoms of chronic cardiovascular, metabolic and/or renal disease
c. the process for determining the need for medical clearance prior to participation in fitness testing and exercise programs
d. relative and absolute contraindications to exercise testing

2. Skill in:
a. identifying modifiable risk factors for cardiovascular disease and teaching clients about risk reduction
b. determining appropriate fitness assessments based on the initial client consultation
c. following protocols during fitness assessment administration
d. interpret preparticipation physical activity screening, including self-guided screening (e.g., PAR-Q)
e. interpret professionally supervised screening, including informed consent, preparticipation physical activity screening (e.g., ACSM, AHA), health history and cardiovascular risk factor analysis

2. Skill in
a. obtaining and securing health/medical history, medical clearance and informed consent
b. listening to and responding to the client's questions and concerns while building trust, rapport, and a safe environment

NOTE: New

C. Review and analyze client data to identify risk, formulate a plan of action, and conduct physical assessments.

1. Knowledge of:
a. risk factors, signs, and symptoms of chronic cardiovascular, metabolic and/or renal disease
NOTE: Combined statements from previous outline
b. the process for determining the need for medical clearance prior to participation in fitness testing and exercise programs
c. relative and absolute contraindications to exercise testing

2. Skill in
a. identifying modifiable risk factors for cardiovascular disease and educating clients about risk reduction
NOTE: Minor text edit
b. determining appropriate fitness assessments based on the initial client consultation
c. following protocols during fitness assessment administration
d. interpret preparticipation physical activity screening, including self-guided screening (for example, PAR-Q)
e. interpret professionally supervised screening, preparticipation physical activity screening (for example, ACSM, AHA), health history and cardiovascular risk factor analysis
NOTE: Minor text edit to remove informed consent (covered in 1.B.2.a)

D. Evaluate behavioral readiness and develop strategies to optimize exercise adherence.

1. Knowledge of:

- a. behavioral strategies to enhance exercise and health behavior change (e.g., reinforcement, S.M.A.R.T. goal setting, social support)
- b. health behavior change models (e.g., Socioeconomic Model, Transtheoretical Model, Social Cognitive Theory, Theory of Planned Behavior, Health Belief Model) and effective strategies that support and facilitate behavioral change

2. Skill in:

- a. setting effective client-oriented S.M.A.R.T. behavioral goals
- b. choosing and applying appropriate health behavior modification strategies based on the client's skills, knowledge and level of motivation

E. Assess the components of health- and/or skill-related physical fitness to establish baseline values, set goals and develop individualized programs.

1. Knowledge of:

- a. the basic structures of bone, skeletal muscle and connective tissue
- b. the basic anatomy of the cardiovascular and respiratory systems
- c. the definition of the following terms: anterior, posterior, proximal, distal, inferior, superior, medial, lateral, supination, pronation, flexion, extension, adduction, abduction, hyperextension, rotation, circumduction, agonist, antagonist and stabilizer
- d. the sagittal, frontal (coronal), transverse (horizontal) planes of the body and plane in which each muscle action occurs
- e. the interrelationships among center of gravity, base of support, balance, stability and proper spinal alignment

D. Evaluate behavioral readiness and develop strategies to optimize exercise adherence.

1. Knowledge of:

- a. behavioral strategies to enhance exercise and health behavior change (for example, reinforcement, goal setting, social support)
- b. health behavior change models (for example, Socioeconomic Model, Transtheoretical Model) and effective strategies that support and facilitate behavioral change

2. Skill in:

- a. setting effective client-oriented S.M.A.R.T.S. behavioral goals
- b. choosing and applying appropriate health behavior modification strategies based on the client's skills, knowledge and level of motivation

E. Assess the components of health- and/or skill-related physical fitness to establish baseline values, set goals and develop individualized programs.

1. Knowledge of:

ANATOMY

- a. the basic structures of bone, skeletal, muscle, and connective tissue
- b. the basic anatomy of the cardiovascular and respiratory systems
- c. the following terms: anterior, posterior, proximal, distal, inferior, superior, medial, lateral, supination, pronation, flexion, extension, adduction, abduction, hyperextension, rotation, circumduction, agonist, antagonist, and stabilizer, inversion, eversion
NOTE: Added two terms (inversion and eversion)
- d. major muscle groups (for example, trapezius, pectoralis major, latissimus dorsi, deltoids, biceps, triceps, rectus abdominis, internal and external obliques, erector spinae, gluteus maximus, hip flexors, quadriceps, hamstrings, hip adductors, hip abductors, anterior tibialis, soleus, gastrocnemius)
- e. major bones (for example, clavicle, scapula, sternum, humerus, carpals, ulna, radius, femur, fibula, tibia, tarsals)

f. the following curvatures of the spine: lordosis, scoliosis and kyphosis	BIOMECHANICS f. the sagittal, frontal (coronal), transverse (horizontal) planes of the body and plane in which each muscle action occurs
g. the differences between the aerobic and anaerobic energy systems and the effects of acute and chronic exercise on each	g. the interrelationships among center of gravity, base of support, balance, stability and proper spinal alignment
h. acute responses to cardiorespiratory exercise and resistance training	h. the following curvatures of the spine: lordosis, scoliosis, and kyphosis
i. chronic physiological adaptations associated with cardiovascular exercise and resistance training	i. joint classifications (for example, hinge, ball and socket)
j. physiological responses related to warm-up and cool-down	j. the primary action and joint range of motion specific to each major muscle group
	PHYSIOLOGY
k. physiological basis of acute muscle fatigue, delayed onset muscle soreness (DOMS) and musculoskeletal injury/overtraining	k. the differences between the aerobic and anaerobic energy systems and the effects of acute and chronic exercise on each
l. physiological adaptations that occur at rest and during submaximal and maximal exercise following chronic aerobic and anaerobic exercise training	l. acute responses to cardiorespiratory exercise and resistance training
m. physiological basis for improvements in muscular strength and endurance	m. chronic physiological adaptations associated with cardiovascular exercise and resistance training
n. expected blood pressure responses associated with postural changes, acute physical exercise and adaptations as a result of long-term exercise training	n. physiological responses related to warm-up and cool-down
o. types of muscle actions, such as isotonic (concentric, eccentric), isometric (static), and isokinetic	o. physiological basis of acute muscle fatigue, delayed onset muscle soreness (DOMS) and musculoskeletal injury/overtraining
p. major muscle groups (e.g., trapezius, pectoralis major, latissimus dorsi, deltoids, biceps, triceps, rectus abdominis, internal and external obliques, erector spinae, gluteus maximus, hip flexors, quadriceps, hamstrings, hip adductors, hip abductors, anterior tibialis, soleus, gastrocnemius)	p. physiological adaptations that occur at rest and during submaximal and maximal exercise following chronic aerobic and anaerobic exercise training
q. major bones (e.g., clavicle, scapula, sternum, humerus, carpals, ulna, radius, femur, fibula, tibia, tarsals)	q. physiological basis for improvements in muscular strength and endurance
r. joint classifications (e.g., hinge, ball and socket)	r. expected blood pressure responses associated with postural changes, acute physical exercise and adaptations as a result of long-term exercise training
s. the primary action and joint range of motion specific to each major muscle group	s. the following terms related to muscles: hypertrophy, atrophy, hyperplasia, dynapenia, sarcopenia and sarcopenic obesity

t. the following terms related to muscles: hypertrophy, atrophy, hyperplasia, dynapenia, sarcopenia and sarcopenic obesity

t. physiological bases of the components of health- and/or skill-related physical fitness (cardiovascular endurance, body composition, muscular strength, muscular endurance, flexibility, agility, functional assessment, coordination, balance, power, reaction time and speed)
NOTE: Added "functional assessment"

u. physiological basis of the components of health- and/or skill-related physical fitness (cardiovascular endurance, body composition, muscular strength, muscular endurance, flexibility, agility, coordination, balance, power, reaction time and speed)

u. normal chronic physiologic adaptations associated with cardiovascular, resistance and flexibility training

NEUROMUSCULAR FUNCTION

v. normal chronic physiologic adaptations associated with cardiovascular, resistance and flexibility training

v. types of muscle actions, such as isotonic (concentric, eccentric), isometric (static), and isokinetic

w. test termination criteria and proper procedures to be followed after discontinuing an exercise test

w. the process of muscle recruitment and coordination during movement
NOTE: New

x. anthropometric measurements and body composition techniques (e.g., skinfolds, plethysmography, bioelectrical impedance, infrared, dual-energy x-ray absorptiometry [DEXA], body mass index [BMI], circumference measurements)

x. how the nervous system and muscles adapt to different types of training stimuli
NOTE: New

y. fitness testing protocols, including pre-test preparation and assessments (i.e., cardiovascular endurance, body composition, muscular strength, muscular endurance, flexibility, agility, coordination, balance, power, reaction time and speed)

y. mechanisms underlying muscle fatigue and the processes involved in muscle recovery
NOTE: New

z. interpretation of fitness test results

z. the brain's ability to adapt to experience
NOTE: New

ASSESSMENT TECHNIQUES

aa. the recommended order of fitness assessments

aa. test termination criteria and proper procedures to be followed after discontinuing an exercise test

bb. appropriate documentation of signs or symptoms during an exercise session

bb. anthropometric measurements and body composition techniques (for example, skinfolds, plethysmography, bioelectrical impedance, infrared, dual-energy x-ray absorptiometry (DEXA), body mass index (BMI), circumference measurements)

cc. various mechanisms for appropriate referral to a physician

cc. fitness testing protocols, including pre-test preparation and assessments (including cardiovascular endurance, body composition, muscular strength, muscular endurance, flexibility, agility, coordination, balance, power, reaction time and speed)

dd. interpretation of fitness test results

ee. the recommended order of fitness assessments

2022 Outline (continued)

2. Skill in:
a. locating/palpating pulse landmarks, accurately measuring heart rate and obtaining rating of perceived exertion (RPE)
b. selecting and administering cardiovascular fitness assessments
c. locating anatomical sites for circumference (girth) and skinfold measurements
d. selecting and administering muscular fitness assessments
e. selecting and administering balance and mobility assessments
f. selecting and administering range of motion assessments for various muscle groups
g. recognizing postural deviations that may affect exercise performance and body alignment
h. providing effective client-centered communication of test and assessment results

F. Develop a plan and timeline for reassessing physical fitness, goals and related behaviors

1. Knowledge of:
a. developing fitness plans based on the information obtained in the client interview and the results of the physical fitness assessments
b. alternative health behavior modification strategies
c. the purpose and timeline for reassessing each component of physical fitness (cardiovascular endurance, body composition, muscular strength, muscular endurance, flexibility, agility, coordination, balance, power, reaction time and speed)

2024 Outline (continued)

2. Skill in:
a. locating/palpating pulse landmarks, accurately measuring heart rate, obtaining rating of perceived exertion (RPE), and measuring resting blood pressure <i>NOTE: Added “measuring resting blood pressure”</i>
b. selecting and administering cardiovascular fitness assessments
c. locating anatomical sites for circumference (girth) and skinfold measurements
d. selecting and administering muscular endurance and strength assessments <i>NOTE: Changed “muscular fitness” to “muscular endurance and strength”</i>
e. selecting and administering balance, flexibility, mobility assessments <i>NOTE: Added “flexibility”</i>
f. identifying and addressing potential injury risks during fitness assessments <i>NOTE: New</i>
g. providing effective client-centered communication of test and assessment results

F. Develop a plan and timeline for reassessing physical fitness, goals, and related behaviors.

1. Knowledge of:
a. alternative health behavior modification strategies
b. the purpose and timeline of reassessing each component of physical fitness (including cardiovascular endurance, body composition, muscular strength, muscular endurance, flexibility, agility, coordination, balance, power, reaction time and speed)

II. Exercise Programming and Implementation

A. Review the client's goals, medical history, and assessment results and determine exercise prescription.

1. Knowledge of:

- the risks and benefits associated with guidelines for exercise training and programming for healthy adults, older adults, children, adolescents, pregnant women and individuals with cognitive and psychological disorders
- the risks and benefits associated with guidelines for exercise training and programming for clients with chronic disease who are medically cleared to exercise
- health-related conditions that require consultations with medical personnel prior to initiating physical activity
- components of health- and/or skill-related physical fitness (cardiovascular endurance, body composition, muscular strength, muscular endurance, flexibility, agility, coordination, balance, power, reaction time and speed)
- program development for specific client needs (e.g., sport-specific training, performance, lifestyle, functional, balance, agility, aerobic and anaerobic)
- special precautions and modifications of exercise programming for participation in various environmental conditions (e.g., altitude, variable ambient temperatures, humidity, environmental pollution)
- documenting exercise sessions and performing periodic re-evaluations to assess changes in fitness status

B. Select exercise modalities to achieve the desired adaptations based on the client's goals, medical history, assessment results and available resources.

1. Knowledge of:

- selecting exercises and training modalities based on client's age, functional capacity and exercise test results
- the principles of specificity and program progression

II. Exercise Programming and Implementation.

A. Review the client's goals, medical history, exercise history, and assessment results and determine exercise prescription.

1. Knowledge of:

- the risks and benefits associated with exercise and physical activity for generally healthy adults, older adults, children, adolescents, pregnant clients, individuals who have cognitive and/or psychological disorders, and individuals who have chronic disease and are medically cleared to exercise
NOTE: Text change with combining two previous statements
- health-related conditions that require consultations with medical personnel prior to initiating physical activity
- components of health- and/or skill-related physical fitness (including cardiovascular endurance, body composition, muscular strength, muscular endurance, flexibility, agility, coordination, balance, power, reaction time and speed)
- program development for specific client needs (for example, sport-specific training, performance, lifestyle, functional, balance, agility, aerobic and anaerobic)
- special precautions and modifications of exercise programming for participation in various environmental conditions (for example, altitude, variable ambient temperatures, humidity, environmental pollution)

B. Select exercise modalities to achieve the desired adaptations based on the client's goals, medical history, assessment results, and available resources.

1. Knowledge of:

- selecting exercises and training modalities based on client's training age, goals, and functional capacity
NOTE: Text change to add "goals" and remove "test results"
- the principles of specificity and program progression

2022 Outline (continued)

2024 Outline (continued)

c. the advantages, disadvantages and applications of interval, continuous and circuit training programs for cardiovascular fitness improvements

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d. activities of daily living (ADLs) and their role in the overall health and fitness of the client

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e. differences between physical activity recommendations and training principles for general health benefits, weight management, fitness improvements and athletic performance enhancement

e. differences between physical activity recommendations and training principles for general health benefits, weight management, fitness improvements and athletic performance enhancement

f. advanced resistance training programming (e.g., periodization, power, pyramid training)

f. resistance training methods (for example, periodization, power, pyramid training)

NOTE: Text change to remove “advanced”

g. the six health-related and neuromotor skill-related physical fitness components; agility, balance, coordination, reaction time, speed and power

g. the six health-related and neuromotor skill-related physical fitness components; agility, balance, coordination, reaction time, speed and power

h. the benefits, risks and contraindications for a wide variety of resistance training exercises specific to individual muscle groups (e.g., for rectus abdominis, performing crunches, supine leg raises and plank exercises)

h. the benefits, risks, and contraindications for a wide variety of resistance training exercises specific to individual muscle groups (for example, for rectus abdominis, performing crunches, supine leg raises and plank exercises)

i. the benefits, risks and contraindications for a variety of flexibility, mobility and range of motion exercises (e.g., dynamic and passive stretching, Tai Chi, Pilates, yoga, proprioceptive neuromuscular facilitation, partner stretching)

i. the benefits, risks, and contraindications for a variety of flexibility, mobility and range of motion exercises (for example, dynamic and passive stretching, Tai Chi, Pilates, yoga, proprioceptive neuromuscular facilitation, partner stretching)

j. the benefits, risks and contraindications for a wide variety of cardiovascular training exercises and applications based on client experience, skill level, current fitness level and goals (e.g., walking, jogging, running)

j. the benefits, risks, and contraindications for a wide variety of cardiovascular training exercises and applications based on client experience, skill level, current fitness level and goals (for example, walking, jogging, running)

C. Determine initial Frequency, Intensity, Time and Type (FITT Principle) of exercise based on the client’s goals, medical history and assessment results.

C. Determine initial Frequency, Intensity, Time and Type (FITT Principle) of exercise based on the client’s goals, medical history and assessment results.

1. Knowledge of:

1. Knowledge of:

a. the recommended FITT principle for physical activity for cardiovascular and musculoskeletal fitness in healthy adults, older adults, children, adolescents and pregnant women

a. the recommended FITT principle for physical activity for cardiovascular and musculoskeletal fitness in healthy adults, older adults, children, adolescents and pregnant clients

b. the recommended FITT principle for development of cardiovascular and musculoskeletal fitness in clients with stable chronic diseases who are medically cleared for exercise

b. the recommended FITT principle for development of cardiovascular and musculoskeletal fitness in clients with stable chronic diseases who are medically cleared for exercise

c. exercise modifications for those with physical and intellectual limitations (e.g., injury rehabilitation, neuromuscular and postural limitations)

c. exercise modifications for those with physical and intellectual limitations (for example, injury rehabilitation, neuromuscular and postural limitations)

2022 Outline (continued)

2024 Outline (continued)

- d. implementation and order of the components of an exercise training session (e.g., warm-up, conditioning, cool down, stretching)
- e. identifying specific major muscles/groups, types of muscle action and joint motion when shown a movement/exercise
- f. establishing and monitoring levels of exercise intensity, including heart rate, RPE, pace, maximum oxygen consumption and/or metabolic equivalents (METs)
- g. determining target/training heart rates using predicted maximum heart rate and the heart rate reserve method (Karvonen formula) with recommended intensity percentages based on client fitness level, medical considerations and goals
- h. periodization for cardiovascular, resistance training and conditioning program design and progression of exercises
- i. repetitions, sets, load and rest periods necessary for desired goals
- j. using results from repetition maximum tests to determine resistance training loads

- d. implementation and order of the components of an exercise training session (for example, warm-up, conditioning, cool down, stretching)
- e. identifying specific major muscles/groups, types of muscle action and joint motion when shown a movement/exercise
- f. establishing and monitoring levels of exercise intensity, including heart rate, RPE, pace, maximum oxygen consumption and/or metabolic equivalents (METs)
- g. determining target/training heart rates using predicted maximum heart rate and the heart rate reserve method (Karvonen formula) with recommended intensity percentages based on client fitness level, medical considerations and goals
- h. periodization for cardiovascular, resistance training and conditioning program design and progression of exercises
- i. repetitions, sets, load and rest periods necessary for desired goals
- j. using results from repetition maximum tests to determine resistance training loads

D. Review the proposed program with the client, demonstrate exercises and teach the client how to perform each exercise.

D. Review the proposed program with the client, demonstrate exercises and teach the client how to perform each exercise.

1. Knowledge of:

1. Knowledge of:

- a. adaptations to strength, functional capacity and motor skills
- b. the physiological effects of the Valsalva Maneuver and the associated risks
- c. the biomechanical principles for the performance of common physical activities (e.g., walking, running, swimming, cycling, resistance training, yoga, Pilates, functional training)
- d. the concept of detraining or reversibility of conditioning and effects on fitness and functional performance
- e. signs and symptoms of exhaustion or over-reaching/overtraining
- f. modifying exercise form and/or technique to reduce musculoskeletal injury.
- g. exercise attire for specific activities, environments and conditions (e.g., footwear, layering for cold, light colors in heat)
- h. communication techniques for effective teaching with awareness of visual, auditory and kinesthetic learning styles

- a. adaptations to strength, functional capacity and motor skills
- b. the physiological effects of the Valsalva Maneuver and the associated risks
- c. the basic biomechanical principles for the performance of common physical activities (for example, walking, running, swimming, cycling, resistance training, yoga, Pilates, functional training)
- d. the concept of detraining or reversibility of conditioning and effects on fitness and functional performance
- e. signs and symptoms of exhaustion or over-reaching/overtraining
- f. modifying exercise form and/or technique to reduce musculoskeletal injury
- g. exercise attire for specific activities, environments and conditions (for example, footwear, layering for cold, light colors in heat)
- h. communication techniques for effective teaching with awareness of visual, auditory and kinesthetic learning styles

2022 Outline (continued)

2024 Outline (continued)

2. Skill in:	2. Skill in:
a. demonstrating exercises designed to enhance cardiovascular endurance, flexibility, muscular fitness and neuromotor skills	a. demonstrating exercises designed to enhance cardiovascular endurance, flexibility, range of motion, muscular fitness and neuromotor skills NOTE: Text change with combining two previous statements
b. demonstrating exercises for improving range of motion of major joints	b. demonstrating a wide range of resistance training modalities and activities (for example, variable resistance devices, dynamic constant external resistance devices, kettlebells, static resistance devices)
c. demonstrating a wide range of resistance training modalities and activities (e.g., variable resistance devices, dynamic constant external resistance devices, kettlebells, static resistance devices)	c. demonstrating a wide variety of functional training exercises (for example, stability balls, balance boards, resistance bands, medicine balls, foam rollers)
d. demonstrating a wide variety of functional training exercises (e.g., stability balls, balance boards, resistance bands, medicine balls, foam rollers)	d. providing spotting techniques for injury prevention and exercise assistance NOTE: Minor text change to clarify
e. proper spotting positions and techniques for injury prevention and exercise assistance	e. guiding clients through exercises with clear and concise feedback to minimize the risk of injury NOTE: New

E. Monitor the client's technique and response to exercise, providing modifications as necessary.

E. Monitor the client's technique and response to exercise, providing modifications as necessary.

1. Knowledge of:	1. Knowledge of:
a. normal and abnormal responses to exercise and criteria for termination of exercise (e.g., shortness of breath, joint pain, dizziness, abnormal heart rate response)	a. normal and abnormal responses to exercise and criteria for termination of exercise (for example, shortness of breath, joint pain, dizziness, abnormal heart rate response)
b. proper and improper form and technique while using cardiovascular conditioning equipment (e.g., stair climbers, stationary cycles, treadmills, elliptical trainers)	b. proper and improper form and technique while using cardiovascular conditioning equipment (for example, stair climbers, stationary cycles, treadmills, elliptical trainers)
c. proper and improper form and technique while performing resistance exercises (e.g., resistance machines, stability balls, free weights, resistance bands, calisthenics/body weight)	c. proper and improper form and technique while performing resistance exercises (for example, resistance machines, stability balls, free weights, resistance bands, calisthenics/body weight)
d. proper and improper form and technique while performing flexibility and mobility exercises (e.g., static stretching, dynamic stretching, partner stretching)	d. proper and improper form and technique while performing flexibility and mobility exercises (for example, static stretching, dynamic stretching, partner stretching)

2022 Outline (continued)

2. Skill in:

- a. interpreting client comprehension and body language during exercise
- b. effective communication, including active listening, cueing and providing constructive feedback during and after exercise

F. Recommend exercise progressions to improve or maintain the client's fitness level. Synthesis

1. Knowledge of:

- a. exercises and program modifications for healthy adults, older adults, children, adolescents, pregnant women and individuals with cognitive or psychological disorders
- b. exercises and program modifications for clients with chronic disease who are medically cleared to exercise (e.g., stable coronary artery disease, other cardiovascular diseases, diabetes mellitus, obesity, metabolic syndrome, hypertension, arthritis, chronic back pain, osteoporosis, chronic pulmonary disease, chronic pain)
- c. principles of progressive overload, specificity, variation and program progression
- d. Progression and modification of exercises for major muscle groups (e.g., standing lunge to walking lunge to walking lunge with resistance)
- e. modifications to periodized conditioning programs to increase or maintain muscular strength and/or endurance, hypertrophy, power, cardiovascular endurance, balance, flexibility and range of motion

G. Obtain client feedback to ensure exercise program satisfaction and adherence.

1. Knowledge of:

- a. effective techniques for program evaluation (e.g., survey, written follow-up, verbal feedback)
- b. client goals and appropriate review and modification

2024 Outline (continued)

2. Skill in:

- a. interpreting client comprehension and body language during exercise
- b. effective communication, including active listening, cueing and providing constructive feedback during and after exercise
- c. modifying exercise based on client performance or feedback
NOTE: New, from II.G on 2022

F. Recommend exercise progressions to improve or maintain the client's fitness level.

1. Knowledge of:

- a. exercises and program modifications for healthy adults, older adults, children, adolescents, pregnant clients, and individuals who have cognitive or psychological disorders
- b. exercises and program modifications for clients with stable cardiovascular, metabolic, or renal disease who have been medically cleared to exercise (for example, stable coronary artery disease, other cardiovascular diseases, diabetes mellitus, obesity, metabolic syndrome, hypertension, arthritis, chronic back pain, osteoporosis, chronic pulmonary disease, chronic pain)
NOTE: Minor text changes
- c. principles of progressive overload, specificity, variation and program progression
- d. progression and modification of exercises for major muscle groups (for example, standing lunge to walking lunge to walking lunge with resistance)
- e. modifications to periodized conditioning programs to increase or maintain muscular strength and/or endurance, hypertrophy, power, cardiovascular endurance, balance, flexibility and range of motion

III. Exercise Leadership and Client Education

A. Optimize participant adherence by using effective communication, motivational techniques and behavioral strategies.

1. Knowledge of:

- a. verbal and nonverbal behaviors that communicate positive reinforcement and encouragement (e.g., eye contact, targeted praise, empathy)
- b. learning preferences (auditory, visual, kinesthetic) and how to apply teaching and training techniques to optimize training session
- c. applying health behavior change models (e.g., Socioecological Model, Transtheoretical Model, Social Cognitive Theory, Theory of Planned Behavior) and strategies that support and facilitate adherence
- d. barriers to exercise adherence and compliance (e.g., time management, injury, fear, lack of knowledge, weather)
- e. techniques to facilitate intrinsic and extrinsic motivation (e.g., goal setting, incentive programs, achievement recognition, social support)
- f. strategies to increase non-structured physical activity (e.g., stair walking, parking farther away, biking to work)
- g. health coaching principles and lifestyle management techniques related to behavior change
- h. leadership techniques and educational methods to increase client engagement

2. Skill in:

- a. applying active listening techniques (e.g., asking open-ended questions, mirroring, providing feedback)
- b. using feedback to optimize a client's training sessions
- c. effective and timely uses of a variety of communication channels (email, social media)
- d. using strategies to help clients overcome barriers to exercise

III. Exercise Leadership and Client Education.

A. Optimize participant adherence by using effective communication, motivational techniques, and behavioral strategies.

1. Knowledge of:

- a. verbal and nonverbal behaviors that communicate positive reinforcement and encouragement (for example, eye contact, targeted praise, empathy)
- b. learning preferences (including auditory, visual, and kinesthetic) and how to apply teaching and training techniques to optimize training session
- c. apply behavior change models to influence and guide clients make positive health choices or adopt new habits
- d. barriers to exercise adherence and compliance (for example, time management, injury, fear, lack of knowledge, weather)
- e. techniques to facilitate intrinsic and extrinsic motivation (for example, goal setting, incentive programs, achievement recognition, social support)
- f. strategies to increase non-structured physical activity (for example, stair walking, parking farther away, biking to work)
- g. health coaching principles and lifestyle management techniques related to behavior change
- h. leadership techniques and educational methods to increase client engagement

2. Skill in:

- a. applying active listening techniques (for example, asking open-ended questions, mirroring, providing feedback)
- b. using feedback to optimize a client's training sessions
- c. effective and timely use of a variety of communication channels (for example, email, social media)
- d. using strategies to help clients overcome barriers to exercise (for example, self-monitoring, decisional balance, goal setting, feedback, motivational interviewing)

NOTE: Added examples

B. Educate clients using scientifically-sound resources.

1. Knowledge of:

- a. influential lifestyle factors, including nutrition and physical activity habits
- b. the value of carbohydrates, fats and proteins as fuels for exercise and physical activity
- c. the following terms: body composition, body mass index, lean body mass, anorexia nervosa, bulimia nervosa and body fat distribution
- d. the relationship between body composition and health
- e. the effectiveness of diet, exercise and behavior modification as a method for modifying body composition
- f. the importance of maintaining hydration before, during and after exercise
- g. Dietary Guidelines for Americans
- h. the Relative Energy Deficiency in Sport (including Female Athlete Triad)
- i. the myths and consequences associated with various weight loss methods (e.g., fad diets, dietary supplements, over-exercising, starvation diets)
- j. the number of kilocalories in one gram of carbohydrate, fat, protein and alcohol
- k. industry guidelines for caloric intake for individuals desiring to lose or gain weight
- l. accessing and disseminating scientifically-based, relevant fitness- and wellness related resources and information
- m. community-based exercise programs that provide social support and structured activities (e.g., walking clubs, intramural sports, golf leagues, cycling clubs)
- n. stress management and relaxation techniques (e.g., progressive relaxation, guided imagery, massage therapy)
- o. how clients can self-monitor for appropriate physiological response to exercise (e.g., targets, signs of abnormal response)

B. Educate clients about basic wellness factors using scientifically-sound resources.

1. Knowledge of:

- a. influential lifestyle factors, including nutrition and physical activity habits
- b. the value of carbohydrates, fats and proteins as fuels for exercise and physical activity
- c. the relationship between body composition and health
- d. the effectiveness of diet, exercise and behavior modification as a method for modifying body composition
- e. the importance of maintaining hydration before, during and after exercise
- f. Dietary Guidelines for Americans
- g. the Relative Energy Deficiency in Sport (including Female Athlete Triad)
- h. the myths and consequences associated with extreme weight loss methods (for example, fad diets, dietary supplements, over-exercising, disordered eating)
NOTE: Changed one example
- i. the number of kilocalories in one gram of carbohydrate, fat, protein and alcohol
- j. industry guidelines for caloric intake for individuals desiring to lose or gain weight
- k. community-based exercise programs that provide social support and structured activities (for example, walking clubs, intramural sports, golf leagues, cycling clubs)
- l. stress management and relaxation techniques (for example, progressive relaxation, guided imagery, massage therapy)
- m. how clients can self-monitor for appropriate physiological response to exercise (for example, targets, signs of abnormal response)

C. Obtain client feedback to ensure exercise program satisfaction and adherence.*NOTE: New section added*

1. Knowledge of:
 - a. effective techniques for program evaluation (for example, survey, written follow-up, verbal feedback)
NOTE: New
 - b. client goals and appropriate review and modification
NOTE: New

IV. Legal and Professional Responsibilities**A. Collaborate with health care professionals and organizations to create a network of providers who can assist in maximizing the benefits and minimizing the risk of an exercise program.**

1. Knowledge of:
 - a. reputable professional resources and referral sources to ensure client safety and program effectiveness
 - b. the scope of practice for the Certified Personal Trainer and the need to practice within this scope
 - c. effective and professional communication with allied health and fitness professionals
 - d. identifying individuals requiring referral to a physician or allied health services (e.g., physical therapy, dietary counseling, stress management, weight management, psychological and social services)

IV. Legal and Professional Responsibilities.**A. Collaborate with health care professionals, allied health practitioners, and organizations within their respective scope of practice to optimize the advantages and mitigate the potential drawbacks of an exercise prescription.***NOTE: Text change to expand scope*

1. Knowledge of:
 - a. reputable professional resources and referral sources to ensure client safety and program effectiveness
 - b. the scope of practice for the Certified Personal Trainer and the need to practice within this scope
 - c. effective and professional communication with allied health and fitness professionals
 - d. documenting exercise sessions and performing periodic re-evaluations to assess changes in fitness status
NOTE: Moved from II.A
2. Skill in:
 NOTE: New
 - a. effective communication skills to interact with healthcare professionals and allied health practitioners
NOTE: New
 - b. assessing individual needs and modifying exercise programs to take into account client history and potential contraindications
NOTE: New
 - c. documenting and sharing relevant information with other members of the healthcare team
NOTE: New
 - d. adapting and modifying exercise programs based on feedback and input from other members of the healthcare team
NOTE: New

B. Implement a comprehensive risk management program (including an emergency action plan and injury prevention program) consistent with industry standards of care.

1. Knowledge of:

- a. resources available to obtain basic life support, automated external defibrillator (AED) and cardiopulmonary resuscitation certification
- b. emergency procedures (i.e., telephone procedures, written emergency procedures, personnel responsibilities) in a health and fitness setting
- c. precautions taken to ensure participant safety (e.g., equipment placement, facility cleanliness, floor surface)
- d. the following terms related to musculoskeletal injuries: shin splints, sprain, strain, bursitis, fractures, tendonitis, tendinosis, patellofemoral pain syndrome, low back pain, plantar fasciitis
- e. contraindicated exercises/postures and risks associated with certain exercises (e.g., straight-leg sit-ups, double leg raises, full squats, hurdler's stretch, cervical and lumbar hyperextension, standing bent-over toe touch)
- f. the responsibilities, limitations and legal implications for the Certified Personal Trainer of carrying out emergency procedures
- g. potential musculoskeletal injuries (e.g., contusions, sprains, strains, fractures), cardiovascular/pulmonary complications (e.g., chest pain, palpitations/arrhythmias, tachycardia, bradycardia, hypotension/hypertension, hyperventilation) and metabolic abnormalities (e.g., fainting/syncope, hypoglycemia/hyperglycemia, hypothermia/hyperthermia)
- h. the initial management and basic first-aid procedures for exercise-related injuries (e.g., bleeding, strains/sprains, fractures, shortness of breath, palpitations, hypoglycemia, allergic reactions, fainting/syncope)

B. Implement a comprehensive risk management program (including an emergency action plan and injury prevention program) consistent with industry standards of care.

1. Knowledge of:

- a. resources available to obtain basic life support, automated external defibrillator (AED) and cardiopulmonary resuscitation certification
- b. emergency procedures (including telephone procedures, written emergency procedures, personnel responsibilities) in a health and fitness setting
- c. precautions taken to ensure participant safety (for example, equipment placement, facility cleanliness, floor surface)
- d. contraindicated exercises/postures and risks associated with certain exercises (for example, straight-leg sit-ups, double leg raises, full squats, hurdler's stretch, cervical and lumbar hyperextension, standing bent-over toe touch)
- e. the responsibilities, limitations, and legal implications for the Certified Personal Trainer of carrying out emergency procedures
- f. potential musculoskeletal injuries (for example, contusions, sprains, strains, fractures), cardiovascular/pulmonary complications (for example, chest pain, palpitations/arrhythmias, tachycardia, bradycardia, hypotension/hypertension, hyperventilation) and metabolic abnormalities (for example, fainting/syncope, hypoglycemia/hyperglycemia, hypothermia/hyperthermia)
- g. the need for, and components of, an equipment service plan/agreement
- h. the need for, and use of, safety policies and procedures (for example, incident/accident reports, emergency procedure training) and legal necessity thereof

2022 Outline (continued)

2024 Outline (continued)

- i. the need for and components of an equipment service plan/agreement
- j. the need for and use of safety policies and procedures (e.g., incident/accident reports, emergency procedure training) and legal necessity thereof
- k. the need for and components of an emergency action plan
- l. effective communication skills and the ability to inform staff and clients of emergency policies and procedures

- i. the need for, and components of, an emergency action plan
- j. effective communication skills and the ability to inform staff and clients of emergency policies and procedures

2. Skill in:

- a. demonstrating and carrying out emergency procedures during exercise testing and/or training
- b. assisting, spotting and monitoring clients safely and effectively during exercise testing and/or training

2. Skill in:

- a. demonstrating and carrying out emergency procedures during exercise testing and/or training
- b. assisting, spotting and monitoring clients safely and effectively during exercise testing and/or training
- c. orientation procedures, including equipment utilization and facility layout
- d. equipment maintenance to decrease risk of injury and liability (for example, maintenance plan, service schedule, safety considerations)

NOTE: New

C. Adhere to ACSM Certification's Code of Ethics by practicing in a professional manner within the scope of practice of an ACSM Certified Personal Trainer.

C. Ensure compliance with legal and professional standards across personal training practice, including adherence to federal and state regulations, ethical guidelines, and confidentiality requirements.

NOTE: Text change (combined IV.C-F of 2022 outline)

1. Knowledge of:

- a. the components of both the ACSM Code of Ethics as well as the scope of practice of an ACSM Certified Personal Trainer
- b. appropriate work attire and professional behavior

1. Knowledge of:

- a. the components of general standards of professional conduct and ethical practice
NOTE: Text change to remove reference from ACSM Code of Ethics to general standards
- b. appropriate professional behavior
NOTE: Text change to remove reference from professional attire
- c. professional liability and potential for negligence in training environments
NOTE: From IV.D.1.a of 2022 outline
- d. legal issues for licensed and non-licensed health care professionals providing services, exercise testing and risk-management strategies
NOTE: From IV.D.1.b of 2022 outline

e. U.S. copyright laws (for example, obtain permission before using protected materials or any form of applicable intellectual property)

NOTE: Text change; from IV.E of 2022 outline

f. practices/systems for maintaining client confidentiality

NOTE: From IV.F.1.a of 2022 outline

g. the importance of client privacy (including client personal safety, legal liability, client credit protection, client medical disclosure)

NOTE: From IV.F.1.b of 2022 outline

h. the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act (HIPAA) laws

NOTE: From IV.F.1.c of 2022 outline

2. Skill in:

a. conducting all professional activities within the scope of practice of the ACSM Certified Personal Trainer

2. Skill in:

a. conducting all professional activities within the scope of practice of the ACSM Certified Personal Trainer

b. referencing non-original work

NOTE: from IV.E.2.a of 2022 outline

c. rapidly accessing client emergency contact information

NOTE: from IV.F.2.a of 2022 outline

D. Follow industry-accepted professional, ethical and business standards.

1. Knowledge of:

a. professional liability and potential for negligence in training environments

b. legal issues for licensed and non-licensed health care professionals providing services, exercise testing and risk-management strategies

c. equipment maintenance to decrease risk of injury and liability (e.g., maintenance plan, service schedule, safety considerations)

E. Respect copyright laws by obtaining permission before using protected materials and any form of applicable intellectual property.

1. Knowledge of:

a. national and international copyright laws

2. Skill in:

a. referencing non-original work

F. Safeguard client confidentiality and privacy rights unless formally waived or in emergency situations.

1. Knowledge of:

- a. practices/systems for maintaining client confidentiality
 - b. the importance of client privacy (i.e., client personal safety, legal liability, client credit protection, client medial disclosure)
 - c. the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act (HIPAA) laws
-

2. Skill in:

- a. rapidly accessing client emergency contact information