

Exam Content Outline

Purpose

The aim of the American Council on Exercise® (ACE®) Personal Trainer Certification examination is to evaluate if individuals have the knowledge and skills necessary to perform tasks that are critical for safe and competent practice as ACE Certified Personal Trainers. To ensure the ACE Personal Trainer Certification stays relevant and current, ACE conducts a role delineation study (RDS) every five years to update the composition and focus of the ACE Personal Trainer Certification program and exams.

In July 2022, ACE and Scantron Corporation (now Meazure Learning), a certification and licensure design, development, and testing service company, conducted an RDS for the ACE Personal Trainer Certification to identify the primary tasks performed by personal trainers on a regular basis. The fundamental purpose of this RDS was to establish and validate appropriate content areas for the ACE Personal Trainer Certification examination. The result of this process includes this exam content outline, which serves as a blueprint for each ACE Personal Trainer Certification examination. As you prepare for the exam, it is important to remember that all exam questions are based on this outline.

The blueprint is comprised of tasks, knowledge, and skills necessary for a personal trainer to perform job responsibilities at the entry-level of competence for the profession. These tasks, knowledge, and skills were established by the RDS panel of personal training subject matter experts, and then sent out to thousands of ACE Certified Personal Trainers for validation.

It is the position of ACE that the recommendations outlined here are not exhaustive to the qualifications of a personal trainer, but represent a minimum level of proficiency and theoretical knowledge required to practice as a competent and safe personal trainer. All tasks are assessed on every exam; however, it is important to note that not all knowledge and skill statements listed in the exam content outline will be addressed on each exam administration.

For the most up-to-date version of the Exam Content Outline, please go to www.ACEfitness.org/PTexamcontent and download a free PDF.

Attention Exam Candidates!

When preparing for an ACE certification exam, be aware that the material presented in any textbook may become outdated due to the evolving nature of the fitness industry, as well as new developments in current and ongoing research. These exams are based on an in-depth job analysis and an industry-wide validation survey. By design, these exams assess a candidate's knowledge and application of the most current scientifically based professional standards and guidelines. The dynamic nature of this field requires that ACE certification exams be regularly updated to ensure that they reflect the latest industry findings and research. Therefore, the knowledge and skills required to pass these exams are not solely represented in any single text. In addition to learning the material presented in the ACE textbook, ACE strongly encourages all exam candidates and fitness professionals to keep abreast of new developments, guidelines, and standards from a variety of valid industry sources.

Description

The 2022 Personal Trainer role delineation study defined the task, knowledge, and skill statements in the current exam content outline. Tasks are the individual functions, whether mental or physical, required for certain aspects of a job or profession. Domains are the major areas of responsibilities or activities of a job or profession, and they represent the logical grouping of tasks.

Knowledge and skill statements list the knowledge and/or skills necessary to perform a given task. They include information, actions, or other learnable skills a candidate must possess in order to perform a specific task. An organized body of factual or procedural information is called knowledge, while the proficient physical, verbal, or mental manipulation of data, people, or objects is called skill.

The exam content outline for the ACE Personal Trainer Certification examination has 14 tasks grouped into four domains. Through the RDS process, each domain was assigned a weight that represents the approximate percentage of exam questions that will fall within that domain on each exam. The ACE Personal Trainer Certification exam content outline is presented below, with each domain and associated percentage weight, the tasks that fall within each domain, and the knowledge and skill statements that are associated with performing each task.

DOMAIN I: CLIENT ONBOARDING AND ASSESSMENTS 23%

TASK 1: Obtain health, medical, exercise, and lifestyle information through questionnaires, interviews, and other appropriate documents to determine readiness and risk for exercise participation, identify the need for medical clearance and referrals, and facilitate program design.

Knowledge of:

1. Effective communication strategies (e.g., active listening, verbal and nonverbal)
2. Impact of age, culture, ability (e.g., physical, cognitive), and other factors (e.g., personal, social, physical-activity attributes) on rapport building and the gathering of relevant health and lifestyle information
3. Tools (e.g., preparticipation health screening, motivational interviewing, waivers) and methods (e.g., telephonic, virtual, in-person) used to gather information required for program design and implementation
4. Appropriate dietary evaluation methods and their purposes, inherent risks, and benefits
5. Dietary preferences (e.g., vegan, DASH, low-carbohydrate) and potential impacts on exercise
6. Population-specific (e.g., older adult, prenatal/postpartum, youth) and condition-specific (e.g., low-back issues, diabetes, cancer) health and exercise considerations and contraindications
7. Risk factors for cardiovascular and other chronic diseases or conditions
8. Effects of common medications on physiological responses to exercise (e.g., heart rate, blood pressure)

Skill in:

1. Building rapport, establishing credibility, and developing trust with diverse populations (e.g., age, culture, physical and cognitive ability)
2. Conducting effective interviews and gathering relevant health and lifestyle information prior to exercise participation.

3. Interpreting interview and questionnaire responses to determine contraindications/special considerations for exercise participation using industry standards and guidelines (e.g., PAR-Q+, ACSM guidelines) to facilitate program design.
4. Identifying the need for and obtaining medical clearance and referrals when appropriate

TASK 2: Assess client readiness for health-related behavior change and evaluate exercise attitudes and beliefs through effective communication to build rapport and establish appropriate goals.

Knowledge of:

1. Effective communication strategies (e.g., active listening, verbal and nonverbal)
2. Tools (e.g., exercise history and attitude questionnaire, readiness to change questionnaire) and methods (e.g., motivational interviewing) for determining client attitudes, preferences, and readiness for behavior change
3. Common barriers and motivators for exercise participation and behavior change
4. Theories of behavior change (e.g., transtheoretical model, health belief model)
5. Types of goals and goal-setting processes (e.g., SMART goals, GROW model)

Skill in:

1. Building rapport, establishing credibility, and developing trust
2. Applying effective motivational interviewing strategies (e.g., open-ended questions, clarification, probing)
3. Determining client attitudes, preferences, and readiness for behavior change and appropriate strategies to motivate program adoption and adherence
4. Collaborating with the client to effectively set goals (e.g., SMART goals, GROW model)

TASK 3: Identify and evaluate the quality of foundational movements through observations and assessments to develop appropriate exercise programming that enhances functional movement, health, fitness, and performance.

Knowledge of:

1. Exercise-related anatomy and kinesiology (e.g., major muscle groups, joint actions)
2. Physical laws of motion (e.g., force production, momentum)
3. Biomechanics, joint mobility and stability, and their impact on posture and movement
4. Foundational movement patterns (e.g., bend-and-lift, single-leg, push, pull, rotation)
5. Effective methods for assessing joint position, stability, and mobility to determine their impact on posture, movement, and balance

Skill in:

1. Identifying the effect of daily activities on movement efficiency (e.g., lifestyle, occupational, athletic)
2. Observing and identifying exaggerated postural deviations
3. Selecting and administering appropriate methods for assessing joint mobility and stability
4. Selecting and administering appropriate methods for assessing movement and balance
5. Interpreting results of postural observation, movement screens, and other assessments to facilitate program design

TASK 4: Select and conduct baseline fitness assessments based on client interviews, questionnaires, and standardized protocols to facilitate safe and effective program design and monitor changes over time.

Knowledge of:

1. Exercise testing protocols, methods, and use of appropriate technology in different environments (e.g., virtual, in-person, in-home, in-club, public spaces)
2. Appropriate application and sequencing of fitness assessments (e.g., cardiorespiratory, muscular strength and endurance, flexibility, body composition)
3. Physiological responses to acute exercise participation and variations in workload
4. Variables that affect acute physiological responses to exercise (e.g., age, sex, health status, environmental conditions, hydration, medications)
5. Effective communication strategies (e.g., cueing, verbal and nonverbal)

Skill in:

1. Selecting, administering, and modifying appropriate fitness assessments (e.g., cardiorespiratory, muscular strength and endurance, flexibility, body composition) based on individual client needs and environment
2. Identifying acute physiological responses and applying test-termination criteria
3. Evaluating and interpreting fitness assessment results to facilitate program design
4. Communicating fitness assessment results
5. Leveraging appropriate and available technology (e.g., heart-rate monitor, health apps)

DOMAIN II: PROGRAM DESIGN AND IMPLEMENTATION

31%

TASK 1: Establish appropriate functional, health, fitness, and/or performance goals by interpreting client interview and assessment data to design personalized exercise programs.

Knowledge of:

1. Exercise-related anatomy, physiology, and biomechanics (e.g., major muscle groups, joint actions, cardiorespiratory response)
2. Nutrition and weight-management principles and guidelines (e.g., energy, nutrients, timing, hydration)
3. Guidelines for interpreting client health history, risk factors, readiness to exercise, and other assessment data
4. Effective goal-setting strategies used to elicit behavior change (e.g., SMART goals, GROW model)
5. Personal factors influencing exercise participation and adherence (e.g., personal attributes, physical activity, motivation, past experience)
6. Social determinants of health (e.g., economic stability, education level, social and community context, access to healthcare, health literacy, neighborhood and built environment)

Skill in:

1. Interpreting responses to assessments and exercise (e.g., physiological, psychological, emotional)
2. Integrating responses to interviews and assessments into exercise program design
3. Incorporating findings from various assessments using evidence-based recommendations (e.g., cardiorespiratory fitness, flexibility, muscular strength and endurance, body composition, blood pressure)

4. Communicating assessment results effectively
5. Facilitating effective goal setting (e.g., SMART goals, process, outcome, GROW model)
6. Designing individualized exercise programs based on interviews, assessments, lifestyle, and goals

TASK 2: Design personalized exercise programs by applying appropriate exercise principles and guidelines to enhance function, health, fitness, and performance.

Knowledge of:

1. Exercise-related anatomy, physiology, and biomechanics (e.g., major muscle groups, joint actions and range of motion, cardiorespiratory response, planes of motion)
2. Components of fitness (e.g., cardiorespiratory, body composition, muscular strength and endurance, flexibility)
3. General exercise and program-design principles (e.g., overload, specificity, diminishing returns, recovery, reversibility, progression)
4. Appropriate methods for monitoring individualized responses to cardiorespiratory exercise (e.g., heart rate, ventilatory thresholds, rating of perceived exertion)
5. Acute and chronic physiological and psychological adaptations to exercise
6. Industry guidelines for exercise program variables (e.g., frequency, intensity, time, type, volume, pattern, progression)
7. Appropriate exercise protocols and techniques (e.g., warm-up, cool-down, movement preparation, recovery, myofascial release)
8. Professional organizations and government agencies that establish and publish evidence-based standards and guidelines for exercise (e.g., ACSM, ACOG, ADA, AHA, NIH, CDC, APA)
9. Components of skill-related fitness (e.g., balance, agility, speed, power, reactivity, coordination)

Skill in:

1. Designing individualized exercise programs in accordance with goals (e.g., cardiorespiratory, muscular strength and endurance, performance, mobility, stability, balance, flexibility, body composition, overall well-being)
2. Selecting and sequencing appropriate exercises based on individualized function, health, fitness, and performance
3. Designing appropriate cardiorespiratory programs based on individualized exercise responses (e.g., heart rate, ventilatory thresholds)
4. Implementing appropriate program components (e.g., warm-up, cardiorespiratory, muscular strength and endurance, cool-down, recovery) and effective exercise techniques
5. Modifying exercise techniques as needed to promote safe exercise participation and goal attainment
6. Modifying instruction and program components to accommodate individual differences in health and/or fitness status in different environments (e.g., virtual, in-person, in-home, in-club, public spaces)

TASK 3: Select appropriate exercises and equipment and integrate them into client programs in accordance with evidence-based research and guidelines to improve function, health, fitness, performance, and overall well-being.

Knowledge of:

1. General exercise and program design principles (e.g., overload, specificity, diminishing returns, recovery, reversibility, progression)
2. Appropriate exercise and equipment selection needed to achieve task- and goal-specific outcomes
3. Appropriate methods for monitoring individualized responses to cardiorespiratory exercise (e.g., heart rate, ventilatory thresholds, RPE)
4. Acute and chronic physiological and psychological adaptations to exercise
5. Physical laws of motion (e.g., inertia, acceleration, momentum, impact and reaction forces, lever classes, force production)
6. Optimal joint stability and mobility, movement patterns, and their relation to posture and the kinetic chain (e.g., balance, joint alignment, significant muscle imbalances)
7. Strategies and techniques for progressing or regressing the intensity or complexity of movement (e.g., modification of base of support, amount of load, line of pull, velocity, center of gravity)

Skill in:

1. Identifying movement-pattern deviations
2. Identifying physiological and psychological demands of activities of daily living and lifestyle (e.g., occupation, sport)
3. Identifying physiological and psychological responses based on observation and feedback during assessments and exercise
4. Modifying instruction and program components to accommodate health and/or fitness status
5. Designing appropriate cardiorespiratory programs based on individualized exercise responses (e.g., heart rate, ventilatory thresholds)
6. Incorporating appropriate exercises and equipment into program design
7. Implementing safe and effective exercise programs to address muscle imbalances and enhance postural alignment

TASK 4: Instruct clients on safe and effective exercise techniques and equipment use through verbal, visual, and kinesthetic cues to promote adherence and achieve program goals.

Knowledge of:

1. Appropriate exercise techniques using a variety of equipment, technology, and modalities in different environments (e.g., virtual, in-person, in-home, in-club, public spaces)
2. Communication strategies (e.g., active listening, verbal and nonverbal communication)
3. Forms of cueing (e.g., exercise demonstration, verbal instruction, tactile correction)
4. Educational strategies used to promote client safety and program success
5. Methods for measuring and monitoring exercise intensity
6. Appropriate breathing techniques

Skill in:

1. Utilizing communication strategies that align with individual client needs and preferences (e.g., learning style, sensory needs, knowledge, attitudes, beliefs, culture)
2. Modifying exercise techniques as needed to promote goal attainment
3. Recognizing and correcting compensatory movement patterns
4. Teaching safe and effective exercise techniques using a variety of equipment, modalities, and feedback in different environments (e.g., virtual, in-person, in-home, in-club, public spaces)
5. Leveraging available technology in program implementation (e.g., digital streaming, apps, software)

DOMAIN III: PROGRAM MODIFICATION AND PROGRESSION 27%

TASK 1: Facilitate program adherence by providing clients with positive experiences that build self-efficacy using motivation, education, and program modifications to achieve client-centered goals.

Knowledge of:

1. Current fitness methods, products, and services (e.g., small-group training, equipment, apparel) and their associated risks and benefits
2. Factors that impact adherence to behavior-change programs (e.g., personal attributes, physical activity, environment, socioeconomic, self-efficacy)
3. Communication styles and techniques that promote adherence to client goals in different environments (e.g., virtual, in-person, in-home, in-club, public spaces)
4. Acute and chronic physiological and psychological adaptations to exercise
5. Strategies and techniques for progressing or regressing the intensity or complexity of exercise movements (e.g., modification of base of support, amount of load, line of pull, velocity, center of gravity), cardiorespiratory exercise, and total workload
6. Behavior-change models and human development tools/theories (e.g., transtheoretical model, DISC model, decisional balance)
7. Credible resources that support healthy lifestyle modifications (e.g., evidence-based online exercise libraries, nutrition information)
8. Factors that enhance safety, belonging, and inclusivity
9. Risks and benefits of common diets and supplements

Skill in:

1. Maintaining rapport, credibility, and trust
2. Educating clients about basic nutrition and weight-management guidelines
3. Educating clients on how to manage the frequency, intensity, and complexity of various exercises
4. Educating clients on how to manage factors that impact program adherence (e.g., personal attributes, physical activity, environment, socioeconomic, self-efficacy)
5. Modifying exercise technique, selection, and intensity as needed to ensure safety and promote goal attainment
6. Motivating clients to adhere to exercise programs
7. Creating a safe and inclusive environment to increase self-efficacy and belonging

8. Helping clients build confidence, self-efficacy, and autonomy by using a variety of behavior-change or coaching strategies (e.g., program modification, emphasizing client strengths, active listening, feedback)
9. Helping clients to acquire knowledge of their own body (e.g., posture, exercise form, movement) to promote self-awareness
10. Educating clients about the risks and benefits of common diets and supplements

TASK 2: Recognize and respond to lapses in program adherence by acknowledging barriers and enhancers and collaboratively identifying solutions to facilitate consistent client engagement.

Knowledge of:

1. Factors (e.g., psychological, physiological, social, environmental) that influence program participation and adherence
2. Personal factors or characteristics that influence communication, lifestyle, and preferences
3. Strategies to mitigate lapses and overcome common barriers to exercise program adherence

Skill in:

1. Identifying potential barriers and enhancers that influence program adherence and goal attainment
2. Implementing strategies to help clients overcome barriers
3. Adjusting program variables (e.g., sets, repetitions, intensity, rest, tempo) to promote adherence
4. Using appropriate verbal and nonverbal communication techniques
5. Identifying the need for referral to appropriate allied health professionals

TASK 3: Routinely evaluate program effectiveness through observations, client feedback, and data to collaboratively modify programs as needed.

Knowledge of:

1. Nutrition assessments and protocols (e.g., dietary recalls, food logs, questionnaires) that are within the personal trainer's scope of practice
2. Appropriate fitness assessments
3. Appropriate modifications to program components based upon observations, feedback, and data
4. Industry guidelines for appropriate progressions and regressions (e.g., frequency, intensity, time, type, volume, pattern) for cardiorespiratory, muscular strength and endurance, and flexibility programs
5. Industry guidelines for appropriate progressions and regressions for skill-related fitness (e.g., balance, agility, speed, power, reactivity, coordination)
6. Major muscle groups, planes of motion, joint actions, and range of motion
7. Primary movement patterns (e.g., bend-and-lift, single-leg, push, pull, rotation) and appropriate variations and modifications
8. Appropriate exercise techniques for optimal body mechanics
9. Appropriate exercises and intensities (e.g., load, rating of perceived exertion, ventilatory thresholds) for desired outcomes
10. Physiological and psychological responses to exercise

11. Appropriate breathing techniques to execute various types of exercise (e.g., muscular training, Pilates, yoga, tai chi, qi gong)
12. Criteria for terminating exercise

Skill in:

1. Selecting and administering appropriate assessments (e.g., movement, posture, fitness, nutritional, behavioral) to evaluate progress and adjust program goals as necessary
2. Gathering and interpreting client data and feedback to evaluate progress and adjust program goals as necessary
3. Recognizing signs and symptoms of overtraining (e.g., decline in physical performance, change in appetite, excessive fatigue, mood disturbances)
4. Selecting exercises, equipment, and workloads to progress and regress exercise programs as needed based on client function, health, fitness, and performance
5. Eliciting client readiness to exercise through communication (e.g., OARS, motivational interviewing)
6. Identifying client readiness to exercise through observation (e.g., body language, movement patterns, mood monitoring, active listening)
7. Recognizing changes in physiological and psychological responses to exercise (e.g., performance, response to imposed demands, mood, movement-pattern deviations)
8. Modifying exercises, techniques, and program variables based on observations and client feedback in different environments (e.g., virtual, in-person, in-home, in-club, public spaces)
9. Recognizing signs for termination of exercise

DOMAIN IV: RISK MANAGEMENT, PROFESSIONAL CONDUCT, AND ETHICAL BUSINESS PRACTICES

19%

TASK 1: Apply risk-management strategies in a variety of settings (e.g., virtual, in-person, in-home, in-club, public spaces) in accordance with recognized standards, guidelines, laws, and regulations to minimize liability and protect the client, personal trainer, and other relevant parties.

Knowledge of:

1. Applicable guidelines, standards, laws, and regulations (e.g., CDC, ACSM, OSHA, FLSA, HIPAA, FERPA, NCMW)
2. Basic procedures for emergency response within the scope of practice (e.g., CPR, AED, first aid, emergency action plans, crisis management)
3. Best practices for delivering exercise programs
4. Best practices for injury prevention and safety (e.g., line-of-sight, staging, equipment condition, spotting, exercise environment, emergency exits)
5. Industry guidelines for delivering exercise programs in a variety of environmental conditions (e.g., altitude, extreme weather, temperature, humidity, air pollution)
6. Factors contributing to negligence (e.g., acts of commission, acts of omission)
7. Risk-management protocols (e.g., identification, evaluation, approach, implementation, monitor)
8. Methods for maintaining confidentiality and privacy through secure data storage and communication channels (e.g., incident reports, accident reports, waivers, informed consent, SOAP notes)

Skill in:

1. Identifying and reporting potential hazards in accordance with recommended industry or facility protocols
2. Conducting risk analyses (e.g., identification, evaluation, approach, implementation, monitor) for safe exercise participation
3. Instructing and supervising safe and effective exercises and use of exercise equipment
4. Using safe spotting techniques with clients during exercises
5. Referring clients to appropriate allied health professionals
6. Identifying and implementing proper protocols for safe and secure use of technology (e.g., communication, marketing, data tracking, consent)
7. Identifying, responding to, and documenting emergency situations and safety hazards
8. Modifying exercise sessions based on extreme environmental conditions (e.g., altitude, extreme weather, temperature, humidity, air pollution)
9. Selecting appropriate risk-management approaches (e.g., avoidance, transfer, reduction, and retention)

TASK 2: Stay current with evolving health and fitness industry standards and job-related scope of practice to enhance professional credibility and trust.**Knowledge of:**

1. Scope of practice, ACE Code of Ethics, and professional conduct
2. Professional organizations and government agencies that establish and publish evidence-based research and guidelines (e.g., ACOG, ACSM, DHHS, USDA, NIH, CDC, AND)
3. Credible continuing education providers, programs, and resources (e.g., certifying organizations, conference, live and virtual courses, scientific and professional journals)
4. Professional conduct regarding communication platforms, protection of privacy, and the proper use of technology (e.g., social media, email, text messaging, apps, wearable devices)
5. Equity, diversity, inclusion, and cultural competency

Skill in:

1. Discerning credible from noncredible resources to stay current with evidence-based research, theories, and practices
2. Disseminating relevant and evidence-based exercise programming and educational information based on individual needs (e.g., social media, blogs, community groups)
3. Selecting appropriate communication channels based on client and personal trainer agreements
4. Demonstrating appropriate actions that promote equity, diversity, inclusion, and cultural competency
5. Identifying appropriate relationships and identifying professional boundaries with clients and colleagues

TASK 3: Pursue ongoing knowledge of evolving ethical business practices in a variety of health and fitness settings (e.g., virtual, in-person, in-home, in-club, public spaces) to enhance the client experience.

Knowledge of:

1. Components of the allied healthcare continuum [e.g., roles, settings, members, basic principles of healthcare ethics (e.g., autonomy, beneficence, non-maleficence, justice)]
2. Emerging trends that influence personal training (e.g., technology, theory, consumer behavior, equipment, ecosystems)
3. Components of a business plan (e.g., executive summary, products and services, market analysis, strategy and implementation)
4. Basic principles of a marketing plan (e.g., business initiatives, target market, strategy, channels)
5. Legal documents and procedures (e.g., waivers, permits, professional insurance)
6. Behavior-change models and theories as they relate to client behavior and decision making [e.g., transtheoretical model of behavior change, health belief model, self-determination theory, essence of wisdom (i.e., wisdom from others, intellectual wisdom, experiential wisdom)]

Skill in:

1. Building a referral network
2. Integrating appropriate technological platforms to serve client needs
3. Using emerging equipment/programming platforms to enhance client experience
4. Cultivate appropriate client recruitment and engagement opportunities
5. Identifying appropriate opportunities to advance personal knowledge (e.g., continuing education providers, courses, mentorship)
6. Gathering, interpreting, and implementing client feedback appropriately
7. Applying concepts and practices to support equity, diversity, inclusion, and justice throughout the client experience

Note: ACOG = American College of Obstetricians and Gynecologists; ACSM = American College of Sports Medicine; ADA = American Diabetes Association; AED = Automated external defibrillator; AHA = American Heart Association; AND = Academy of Nutrition and Dietetics; APA = American Pediatrics Association; CDC = Centers for Disease Control and Prevention; CPR = Cardiopulmonary Resuscitation; DASH = Dietary Approaches to Stop Hypertension eating plan; DHHS = U.S. Department of Health & Human Services; FERPA = Family Educational Rights and Privacy Act; FLSA = Fair Labor Standards Act; GROW = Goal, reality, options, will; HIPAA = Health Insurance Portability and Accountability Act; NCMW = National Council for Mental Wellbeing; NIH = National Institutes of Health; OARS = Open-ended questions, affirmations, reflections, summarizing; OSHA = Occupational Safety and Health Administration; PAR-Q+ = Physical Activity Readiness Questionnaire for Everyone; SMART = Specific, measurable; attainable; relevant; time-bound; USDA = U.S. Department of Agriculture