ACE® GROUP FITNESS INSTRUCTOR CERTIFICATION EXAM CONTENT OUTLINE

ATTENTION EXAM CANDIDATES!

hen preparing for an ACE certification exam, be aware that the material presented in the ACE Group Fitness Instructor Handbook, or any other text or educational materials, may become outdated due to the evolving nature of the fitness and healthcare industries, as well as new developments in current and ongoing research. ACE certifications and the exams one must pass to earn these certifications are based on in-depth job analyses and industry-wide validation surveys.

By design, ACE certification exams assess a candidate's ability to analyze multiple case studies that are representative of the work that a certified professional would encounter on a daily, weekly, or monthly basis, and then to apply knowledge of the most current scientifically based professional standards and guidelines to determine the best solution for the scenario presented. 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, skills, and abilities required to pass these exams are not solely represented in this or any other industry text or educational materials. In addition to learning the material presented on our website, in this handbook, and in associated educational resources, ACE strongly encourages all exam candidates and health and exercise professionals to keep abreast of new developments, guidelines, and standards from a variety of valid industry sources.



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

EXAM CONTENT OUTLINE

The Exam Content Outline is essentially a blueprint for the exam. As you prepare for the ACE Group Fitness Instructor Certification Exam, it is important to remember that each question on the Exam maps directly to one of the Task Statements in this outline.

TARGET AUDIENCE STATEMENT

The ACE certified Group Fitness Instructor (ACE GFI) prepares and leads safe, effective, and enjoyable exercise classes to promote fitness and support a healthy, active lifestyle. In addition to understanding how to apply knowledge of exercise science in fitness classes, the ACE GFI motivates and leads by using teaching techniques suitable for multiple stages and styles of learning, and adapts workouts based on the diverse needs of the participants.

The following eligibility requirements have been established for individuals to sit for the ACE Group Fitness Instructor Certification Examination:

- Must be at least 18 years of age
- Must hold a current adult cardiopulmonary resuscitation (CPR) certificate, and if living in the U.S.A. or Canada, a current automated external defibrillator (AED) certificate
- Must have completed high school (or the equivalent)

DOMAINS, TASKS, AND KNOWLEDGE AND SKILL STATEMENTS

A Role Delineation Study, or job analysis, was conducted by the American Council on Exercise and Scantron Corporation, Inc., for the ACE Group Fitness Instructor Certification Program. The first step in this process was completed by a panel of subject-matter experts in the various disciplines within the field of group fitness. The primary goal of the panel was to identify the primary tasks performed by professional GFIs in creating, leading, and adapting inclusive group fitness classes of varied formats to help diverse groups of individuals to improve health and fitness, and to make meaningful health behavior changes for sustained results.

The panel first identified the major responsibilities performed by professional GFIs. These responsibilities are defined as "Tasks," and it was determined that the responsibilities of the professional GFI could be described in 13 task statements. These tasks were then grouped into three Performance Domains, or major areas of responsibility.

The Performance Domains are listed here with the percentage indicating the portion of the exam devoted to each Domain:

- Domain I: Class Preparation 34%
- Group Instruction and Leadership 39%
- Professional Conduct and Risk Management 27%

Each Performance Domain is composed of Tasks, which detail the job-related functions under that particular Domain. Each Task is further divided into Knowledge and Skill Statements that detail the scope of information and understanding required to perform each Task and explain the skills required to apply that understanding in a practical setting.

The Domains, Task Statements, and Knowledge and Skill Statements identified by the panel of subject-matter experts were presented to a large, nationally representative group of current ACE Certified GFIs through an online survey, and the survey results were used to validate the work of the panel and establish test specifications for the Exam. This completed the Role Delineation Study, with the outcome of this study being the ACE Group Fitness Instructor Certification Exam Content Outline detailed here. Please note that while each question on the Exam maps to one of the Tasks in the Exam Content Outline, not all Knowledge and Skill Statements will be addressed on each exam administration, as there are not enough questions on a certification exam to cover every knowledge and skill statement.

DOMAIN I: CLASS PREPARATION 34%

Prepare to instruct group fitness classes by creating class plans and selecting, organizing, and rehearsing appropriate exercises to deliver a positive and inclusive experience.

Task 1:

Create a plan based on the class format, class objectives, and anticipated participants to establish a structure for safe and effective experiences.

Knowledge of:

- Group fitness class formats (e.g., dance-based, mind-body, indoor cycling, strength, kickboxing, interval training)
- 2. Objectives of various class formats
- Group fitness class components (e.g., warm-up, conditioning, cool-down)
- 4. Characteristics of anticipated participants (e.g., demographics, experience, ability)
- 5. Time management as it relates to the weighting of each component of the class
- Location and space requirements of various group fitness class formats

Skill in:

- 1. Determining objectives for specific group fitness classes
- Allocating appropriate time for each component of the class
- 3. Preparing for environmental factors and anticipated participants
- Creating group fitness class plans that meet the objectives of the class and the needs of participants

Task 2:

Select and organize exercises in sequences that align with exercise science principles, class components, and class elements (e.g., music, equipment) to meet class objectives.

- Anatomy, kinesiology, and exercise physiology (e.g., major muscle groups, joint actions, cardiorespiratory responses)
- 2. Principles of training (e.g., overload, specificity, reversibility, progression, regression)
- 3. Health-related components of fitness (e.g., muscular strength and endurance, cardiorespiratory fitness)
- 4. Skill-related components of fitness (e.g., balance, agility, coordination)
- Appropriate exercises and intensities related to components (e.g., warm-up, conditioning, cool-down) of group fitness class formats
- Teaching strategies (e.g., slow to fast, repetition reduction, part to whole, simple to complex)
- Options, intended purposes, and space requirements for using various types of group fitness equipment (e.g., steps, elastic resistance, stability balls, yoga mats)
- AV equipment capabilities and use (e.g., stereo, microphone, lighting, video)
- Characteristics of music (e.g., beats per minute, structure, content) and their relation to group fitness class formats, objectives, and anticipated participants
- 10. Licensing laws pertaining to music in a fitness setting

- 11. The relationship of music and group fitness equipment with exercise intensity
- 12. Appropriate sequencing of exercises to facilitate desired progressions and regressions within group fitness classes
- 13. Modifications for exercises used in group fitness classes to accommodate varied participant abilities

- Selecting and sequencing exercises for health-related components, skill-related components, and physiological responses
- 2. Applying principles of training to selected exercises (e.g., overload, specificity, reversibility, progression, regression)
- 3. Incorporating exercises that use a variety of movement variables (e.g., planes of motion, lever length, balance, external resistance)
- 4. Using various types of equipment (e.g., steps, elastic resistance, stability balls, yoga mats) in a group fitness setting
- Utilizing the space effectively as it relates to equipment use and participant group size
- 6. Coordinating musical phrasing and tempo with movement and exercises within applicable group fitness class formats
- 7. Selecting appropriate music (e.g., beats per minute, structure, content) for varied group fitness class formats, objectives, and participants
- Sequencing exercises to facilitate desired progressions and regressions within group fitness classes

Task 3:

Identify appropriate exercise options (e.g., regressions, progressions, modifications) to reduce the risk of injury, improve performance, and create an inclusive class environment.

Knowledge of:

- 1. Anatomy, kinesiology, and exercise physiology (e.g., major muscle groups, joint actions, cardiorespiratory responses)
- 2. Principles of training (e.g., overload, specificity, reversibility, progression, regression) and their application to varied group fitness class formats and objectives
- Regressions, progressions, and modifications for exercises and movements used in various group fitness class formats
- 4. Current guidelines for adapting exercises to improve and maintain cardiorespiratory fitness, muscular strength and endurance, and flexibility
- 5. Safe and effective exercises that support functional training concepts
- Exercise options for common muscular imbalances, chronic injuries, and population- and conditionspecific needs and guidelines

- 1. Including variety in the group fitness class plan
- Accommodating the skill- and health-related needs, ability levels, and preferences of class participants

- 3. Incorporating exercise variables (e.g., direction, rhythm, range of motion) into the class plan
- Selecting exercise options that incorporate appropriate principles of training (e.g., overload, specificity, reversibility, progression, regression) as they relate to the class format and objectives
- Evaluating the purpose and key elements of exercises (e.g., joint movements, muscle actions) to develop regressions, progressions, and modifications
- Determining appropriate regressions, progressions, and modifications for each exercise based on class location, space parameters, and the participant class size
- Appropriate application of safe and effective exercises that support functional training concepts

Task 4:

Rehearse the class content and refine the plan as needed to ensure a positive and successful experience.

Knowledge of:

- Methods for adjusting exercise intensity (e.g., exercise selection, equipment use, music, movement variables and speed)
- 2. Effective dimensional cueing (e.g., directional, alignment, breathing, spatial)
- 3. Teaching styles (e.g., command, practice, self-check) appropriate for group fitness classes
- 4. Communication and learning styles (e.g., verbal, visual, kinesthetic)
- 5. Appropriate use of group fitness—related equipment
- 6. Music variables that impact the class plan (e.g., beats per minute, structure, lyrics/content)
- 7. Movement variables that impact exercise intensity (e.g., lever length, external resistance, balance, speed)

- 1. Preparing opening and closing statements
- Refining teaching strategies (e.g., slow to fast, repetition reduction, part to whole, simple to complex)
- Determining appropriate transitions and sequence adjustments to facilitate class flow and align with class plan objectives
- 4. Identifying elements of group fitness class plans that require modifications based on class rehearsal
- Incorporating appropriate cueing techniques (e.g., verbal, nonverbal, kinesthetic) based on class format to achieve desired class outcomes
- Refining the timing of cueing techniques (i.e., anticipatory, instructional, follow-up, motivational)
- Adjusting music (e.g., beats per minute, structure, decibels) for group fitness class components based on class format, anticipated participants, and expected outcomes
- Coordinating musical phrasing and tempo with movement and exercises with applicable group fitness class formats

DOMAIN II: GROUP INSTRUCTION AND LEADERSHIP

Lead safe, effective, and inclusive group fitness classes that motivate participants to be physically active and pursue healthier, more active lifestyles.

Task 1:

ssess the space, equipment, environment, and participants to identify potential issues and make appropriate adjustments to the class plan to ensure a safe and effective experience.

Knowledge of:

- 1. Environmental factors and potential hazards (e.g., temperature, humidity, air quality, altitude) that affect the class experience and participant safety
- 2. Factors that affect safe use of exercise equipment by participants (e.g., worn bands, chipped dumbbells, deflated stability balls)
- Guidelines and recommendations for various group fitness formats and settings
- 4. Population- and condition-specific health and exercise considerations and contraindications
- 5. Equipment selection, space, and acoustic requirements for safe and effective exercises
- 6. Observed and self-reported health, fitness, and movement variables that impact exercise participation

Skill in:

- Adapting the class plan based on specific environmental conditions 1.
- 2. Adjusting equipment selection relative to class design, placement, and spacing
- 3. Identifying hazards in the group fitness class setting
- Recognizing the needs and capabilities of participants of varying cultural backgrounds, demographics. levels of fitness, movement skills, and special needs
- Adapting the class plan to provide an inclusive and positive exercise experience for participants of varying cultural backgrounds, demographics, levels of fitness, movement skills, and special needs

Task 2:

Communicate with participants in a welcoming, positive, and engaging manner prior to, during, and after class to build rapport and promote class adherence.

- 1. Opening and closing statements that facilitate a positive experience for participants
- 2. Effective group and interpersonal communication techniques that enhance rapport (e.g., active listening, acknowledgement, use of empathy, inclusive language)
- 3. Factors that influence adherence (e.g., personal attributes, environmental factors, physical-activity factors)
- 4. Participant-centered teaching strategies

- 1. Delivering informative and inclusive opening and closing statements
- 2. Explaining class objectives and structure to facilitate positive class experiences
- 3. Establishing the tone of the class in a positive and motivating manner
- 4. Building rapport, establishing credibility, and developing trust with class participants
- 5. Fostering a sense of community among class participants
- 6. Providing appropriate feedback to help build long-term adherence
- 7. Responding professionally to solicited and unsolicited participant feedback
- 8. Listening effectively

Task 3:

Instruct participants by demonstrating proper exercise movements and modifications (e.g., regressions and progressions) while using verbal and nonverbal communication to improve technique, reduce the risk of injury, and improve performance.

Knowledge of:

- Body alignment and posture (e.g., neutral spine) for proper execution of dynamic and static exercises
- Appropriate exercise techniques and movement patterns for a variety of group exercise formats and methods
- 3. Progressions and regressions for exercises used in various group fitness class formats
- Cueing and communication techniques for different learning styles (e.g., verbal, visual, kinesthetic)
- Techniques for demonstrating (e.g., mirroring, matching) proper exercise movements and modifications
- Domains and stages of learning (e.g., cognitive, associative, autonomous)
- Methods for improving health- and skill-related components of fitness (e.g., flexibility, cardiorespiratory fitness, muscular strength and endurance, balance) to accommodate various fitness levels
- Population- and condition-specific exercise guidelines and contraindications (e.g., older adults, prenatal/postpartum, diabetes, obesity)
- Methods for adjusting class intensity (e.g., exercise selection, equipment use, music, movement variables and speed)
- 10. Physical signs and symptoms of overexertion, fatigue, dehydration, and overtraining
- 11. Physiological responses and adaptations that result from variations in environmental conditions (e.g., temperature, humidity, wind, air quality, altitude)

- Recognizing and accommodating participants in various stages of learning (e.g., cognitive, associative, autonomous)
- Applying effective instructional methods for teaching and correcting exercise techniques and movements
- Communicating succinctly and with purpose (e.g., vocalization, pausing, intonation, filler words,

- clarity, enunciation)
- Implementing cueing techniques (e.g., anticipatory, instructional, follow-up, motivational) 4.
- Cueing exercise movements, modifications, and transitions 5.
- Identifying the need for exercise modifications during each class based on participant abilities and responses to exercise
- 7. Modifying exercises to accommodate varied participant abilities and fitness levels
- Leading exercise through mirroring and matching techniques
- Manipulating various movements, pieces of equipment, types of music, and teaching styles within any class format
- 10. Implementing appropriate teaching strategies (e.g., slow to fast, repetition reduction, part to whole, simple to complex) to accommodate participant fitness, skill levels, cultural background, and class modality
- 11. Selecting appropriate communication techniques for various group fitness formats, objectives, and participants
- 12. Teaching and demonstrating exercises with proper form and technique
- 13. Teaching multiple exercise and movement options to accommodate various fitness levels and abilities
- 14. Using strategies that minimize vocal stress
- 15. Adapting class components, exercises, and sequencing based on environmental conditions
- 16. Identifying the need to terminate exercise for a participant or the class
- 17. Incorporating various teaching styles (e.g., command, practice, self-check) appropriate for group fitness classes
- 18. Modifying exercise variables (e.g., exercise selection, intensity, duration, recovery) to improve participant performance, adherence, and self-efficacy
- 19. Monitoring intensity levels of varied groups of participants in group fitness classes
- 20. Observing and interpreting participants' nonverbal communication
- 21. Maintaining situational awareness (e.g., location of participants, room characteristics) while leading group fitness classes

Task 4:

Motivate class participants using appropriate methods to increase participant engagement and confidence, improve performance, and create a positive and inclusive environment.

- 1. Effective group and interpersonal communication techniques that enhance rapport (e.g., active listening, open-ended questioning, acknowledgement, use of empathy and compassion)
- 2. Effective motivational techniques that engage participants with various skills, limitations, preferences, and expectations in group fitness classes
- Factors that influence exercise participation and adherence (e.g., personal attributes, environmental, physical activity)

- Strategies to enhance individual autonomy and personal enjoyment in exercise classes
- 5. Participant-centered teaching strategies
- Theories and models of behavior change (e.g., transtheoretical model, health belief model) 6.
- Types and appropriate use of feedback (e.g., corrective, value, and neutral statements) 7.
- 8. Varied abilities and capabilities within population- and condition-specific groups
- 9. Diversity, inclusion, and bias

- 1. Creating a positive and welcoming environment
- Building rapport and trust with class participants (e.g., learning participant names, being accessible and approachable, using culturally appropriate communication techniques)
- Fostering a sense of community and camaraderie among class participants 3.
- Accommodating participants in the various stages of learning and readiness to change
- Providing appropriate feedback based on participant skill, fitness, stage of learning, and/or cultural background
- 6. Adapting communication style to accommodate class variables (e.g., learning styles, class size, class format)
- Interpreting nonverbal communication
- Selecting appropriate motivational techniques (e.g., intrinsic, extrinsic) for desired outcomes

Task 5:

Educate participants on general health and fitness principles and the benefits of physical activity to improve performance, reduce risk of injury, and increase participant self-efficacy.

- Scope of practice as it relates to leading various group fitness class formats
- Principles of training (e.g., overload, specificity, reversibility, progression) as they relate to the class format and objectives
- Theories and models of behavior change (e.g., transtheoretical model, health belief model) 3.
- 4. Various communication and learning styles (e.g., verbal, visual, kinesthetic)
- 5. Effects of exercise consistency on health, fitness, and modifiable risk factors
- General medical conditions and common physical disabilities of special populations
- 7. Applications and limitations of using target heart rate calculations (e.g., percent of heart-rate
- 8. Methods and reasons for monitoring exercise intensity (e.g., heart rate, talk test, ratings of perceived exertion), and their appropriate uses, precautions, and limitations
- Health-related components of fitness (e.g., muscular strength and endurance, cardiorespiratory fitness, flexibility)
- 10. Skill-related components of fitness (e.g., balance, agility, speed, coordination)
- 11. Strategies for enhancing group fitness participant success

- Using positive and inclusive language 1.
- Building rapport, establishing credibility, and developing trust with class participants
- Educating participants about class components (e.g., warm-up, conditioning, cool-down) as they relate to class formats and objectives
- Teaching class participants techniques for self-monitoring exercise intensity (e.g., talk test, heart rate, ratings of perceived exertion)
- Recommending various techniques for self-monitoring
- Recommending appropriate apparel and footwear to participants
- Determining the relevancy and accuracy of information to share with class participants

DOMAIN III: PROFESSIONAL CONDUCT AND RISK MANAGEMENT 27%

Fulfill professional responsibilities through collaboration with allied health professionals, application of risk-management procedures, and adherence to current industry standards and practices necessary to protect participants, facility operators, and group fitness instructors.

Task 1:

Solicit and incorporate feedback from a variety of sources (e.g., participants, peers, supervisors, self) to enhance professionalism and future class experiences.

Knowledge of:

- Characteristics of professional and well-qualified group fitness instructors 1.
- 2. Effective communication and listening techniques
- 3. Feedback types and methods (e.g., positive, negative, performance, immediate, specific)
- Methods for obtaining feedback
- ACE Code of Ethics and ACE Professional Practices and Disciplinary Procedures

- Evaluating feedback to identify successes and areas for improvement 1.
- Collaborating with participants to improve the class experience
- Interpreting and evaluating achievement of objectives within the class plan
- Modifying exercise variables (e.g., movements, intensity, sequence), equipment, music, and teaching styles to improve class delivery

5. Evaluating and modifying instructional goals and objectives

Task 2:

Respond to and manage class incidents and high-risk situations following established protocols to ensure safety and reduce liability.

Knowledge of:

- 1. Environmental risk factors
- Appropriate use and maintenance of equipment used in group fitness classes
- 3. Chronic and acute medical conditions and injuries
- Knowledge of allied health care resources and appropriate referral sources 4.
- 5. Emergency response plans and procedures
- 6. Risk-management policies and procedures
- 7. Signs and symptoms of overexertion and medical emergencies

Skill in:

- Identifying defective equipment 1.
- 2. Using equipment according to manufacturers' specifications
- 3. Recommending and referring to appropriate allied health care professionals when appropriate
- 4. Responding to acute medical incidents and emergencies
- 5. Documenting incidents, injuries, and emergencies
- 6. Executing emergency response plans and procedures
- 7. Implementing appropriate and safe early intervention strategies
- 8. Addressing and resolving conflicts

Task 3:

Maintain and enhance competency by staying current on science-based research, technology, and best practices using credible resources (e.g., professional organizations, peer-reviewed journals) to provide safe and effective classes.

Knowledge of:

- Scope of practice for exercise professionals and ACE GFIs
- 2. ACE Code of Ethics and ACE Professional Practices and Disciplinary Procedures
- 3. Agencies and organizations (e.g., ACE, ACSM, ACOG, NIH) that establish and publish science-based health and fitness standards and guidelines
- Appropriate uses of technology and equipment in group fitness settings 4.
- 5. Credible sources for training and qualifications to teach specific group fitness formats, including the use of specific equipment and modalities
- Reputable group fitness—related products and service providers 6.

Skill in:

Determining appropriate action within the ACE GFI scope of practice

- 2. Identifying credible resources for health- and fitness-related standards, guidelines, and research
- 3. Identifying and applying appropriate uses of technology and equipment in a group fitness setting
- Sharing information that is pertinent to the class plan and participants 4.
- 5. Learning new group fitness class formats, equipment, and modalities from credible sources

Task 4:

Adhere to recognized standards, guidelines, policies, laws, and regulations to manage risk and liability.

Knowledge of:

- 1. Scope of practice for exercise professionals and ACE GFIs
- ACE Code of Ethics and ACE Professional Practices and Disciplinary Procedures
- Appropriate insurance protections (e.g., professional liability insurance, general liability insurance, workers' compensation insurance, health and disability insurance) for group fitness instructors, participants, and other relevant parties in a variety of settings (e.g., indoors, pool, outdoors)
- Appropriate pre-exercise screening requirements (e.g., PAR-Q+, health screening) and their appropriate uses
- Industry guidelines, appropriate laws, and facility procedures relating to safety, risk management, emergencies, and injuries in fitness facilities and/or group exercise classes (e.g., indoors, outdoors, aquatic)
- 6. Procedures for documenting accidents, injuries, and incidents while safeguarding client confidentiality
- 7. Best practices for maintaining professional boundaries
- Standards, laws, and regulations governing confidentiality (e.g., HIPAA)
- 9. Intellectual property laws and regulations
- 10. Relevant media (e.g., video, music) copyright laws
- 11. Appropriate use of social media (e.g., professional boundaries, client permission, confidentiality)
- 12. Employment status designations (e.g., independent contractor, employee)

- 1. Implementing facility/location safety procedures (e.g., emergency, risk management, operations)
- 2. Safeguarding confidential and private information
- 3. Applying appropriate and professional use of social media, music, and trademarks
- Referring participants to appropriate health care providers
- Determining and conducting appropriate action within the ACE GFI's scope of practice
- Determining appropriate insurance and levels of coverage necessary for group fitness instructors based upon the teaching facility and class logistics