



America's Authority on Fitness

ACE Certification Candidate Handbook

The American Council on Exercise
is an NCCA-accredited organization



TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| I. ACE PROFESSIONAL STANDARDS AND CERTIFICATION ACCREDITATION | 4 |
| ACE Mission Statement | 4 |
| ACE Certification Department | 4 |
| ACE Code of Ethics | 5 |
| ACE Professional Practices and Disciplinary Procedures | 5 |
| Accreditation | 6 |
| II. ACE CERTIFICATION EXAMS | 7 |
| ACE Certification Programs | 7 |
| Certification Exam Eligibility Criteria | 8 |
| Appeals for Denied Eligibility | 8 |
| Exam Content Outlines | 9 |
| Personal Trainer | 9 |
| Group Fitness Instructor | 10 |
| Lifestyle and Weight Management Consultant | 11 |
| Advanced Health and Fitness Specialist | 12 |
| Multiple-Choice Exam | 13 |
| Anatomy of a Multiple-choice Question | 13 |
| Recall Questions (with Sample Item) | 14 |
| Application Questions (with Sample Item) | 14 |
| Analysis Questions (with Sample Item) | 15 |
| Written Simulation Exam | 15 |
| Test-taking Strategies for ACE Certification Exams | 17 |
| Study Resources | 18 |
| Exam Administration | 18 |
| Exam Scoring and Passing Criteria | 19 |
| Exam Results | 20 |

| | |
|--|-----------|
| Exam Scoring Appeals | 20 |
| Exam Rescoring | 21 |
| Exam Score Cancellation | 21 |
| Pass Rates for ACE Exams | 21 |
| III. EARNING AN ACE CERTIFICATION | 23 |
| Exam Registration: Paper-and-Pencil Testing | 23 |
| Paper-and-Pencil Special Accommodations | 23 |
| Exam Registration: Computer-Based Testing (CBT) | 24 |
| CBT Special Accommodations | 24 |
| International Exams | 24 |
| Stand-by Candidates | 24 |
| Exam Fees | 25 |
| Rescheduling: Paper-and-Pencil Examinations | 26 |
| Rescheduling: Computer-Based Testing | 26 |
| Refunds | 27 |
| Exam Retakes | 27 |
| Exam Delivery and Security | 27 |
| Pencil-and-Paper Exam Administration and Security | 28 |
| Computer-Based Testing Administration and Security | 29 |
| Confidentiality Policy | 29 |
| Candidate Comments | 30 |
| IV. ACE CERTIFICATION EXAM DEVELOPMENT | 31 |
| Testing Service Provider | 31 |
| Exam Development Procedures | 32 |
| Security | 33 |
| V. MAINTAINING YOUR ACE CERTIFICATION | 34 |
| Certification Renewal Policies and Procedures | 34 |

| | |
|---|-----------|
| Renewing an Expired Certification | 35 |
| Continuing Education Credits | 35 |
| Continuing Education Petitions | 36 |
| Maintaining Your CPR and AED Certificates | 37 |
| ACE Professional Services | 37 |
| Career Development | 37 |
| VI. PRIVACY, SECURITY, AND RECORDS RETENTION | 39 |
| Protection of Privacy | 39 |
| Length of Records Retention | 40 |
| Security | 40 |

SECTION I

ACE PROFESSIONAL STANDARDS AND CERTIFICATION ACCREDITATION

ACE MISSION STATEMENT

The American Council on Exercise® (ACE®) is a nonprofit organization committed to enriching quality of life through safe and effective exercise and physical activity. As America's Authority on Fitness, ACE protects all segments of society against ineffective fitness products, programs and trends through its ongoing public education, outreach and research. ACE further protects the public by setting certification and continuing education standards for fitness professionals.

ACE CERTIFICATION DEPARTMENT

The American Council on Exercise protects the public and serves their interest by awarding professional certifications to qualified fitness professionals that have successfully demonstrated professional competence through a valid and legally defensible evaluation process.

The ACE Certification Department functions independently from the educational department bearing full responsibility for governance over exam development and administration, issuance of certifications and disciplinary action. The ACE Certification Department upholds all established policies and procedures in maintaining the integrity of all examinations set in accordance with NCCA accreditation standards. The ACE Certification Department oversees the requirements for ACE-certified professionals to maintain their credentials, by establishing standards for certification renewal through continuing education.

Oversight for ACE certification program direction is provided by the ACE Board of Directors and the ACE Executive Team. Under the direction of ACE's Chief Science Officer, the ACE Certification Manager oversees all administrative acts of the ACE Certification Department, including management of ACE's Exam Development and Disciplinary Committees and management of ACE's business relationships with CASTLE Worldwide, Inc., the company hired by ACE as its testing service provider.

The ACE Certification Department functions to achieve the following professional objectives:

1. To create and publish standards, policies and procedures for the development and administration of all ACE certification programs;
2. To establish policies, procedures and requirements for continuing education and recertification requirements for ACE professional credential holders;
3. To determine candidate eligibility criteria to sit for each ACE certification examination and for recertification;
4. To develop and implement standards of professional practice (known as the ACE "Code of Ethics") which includes oversight of credentialing and disciplinary matters for ACE certified individuals;
5. To confer recognition to individuals who successfully earn the ACE credential and who successfully complete the continuing education and recertification requirements established by ACE;
6. To uphold and promote the validity of the ACE credential to stakeholders;
7. To comply with standards of, implement policies and programs for, and submit relevant certification and recertification information to regulatory bodies to support the validity and reliability of the ACE credential;
8. To acquire, develop, distribute, and maintain information relative to the certification functions of ACE.

ACE CODE OF ETHICS

As an ACE-certified Professional, I am guided by the American Council on Exercise's principles of professional conduct whether I am working with clients, the public or other health and fitness professionals. I promise to:

- Provide safe and effective instruction.
- Provide equal and fair treatment to all clients.
- Stay up-to-date on the latest health and fitness research and understand its practical application.
- Maintain current CPR certification and knowledge of first-aid services.
- Comply with all applicable business, employment and intellectual property laws.
- Uphold and enhance public appreciation and trust for the health and fitness industry.
- Maintain the confidentiality of all client information.
- Refer clients to more qualified health or medical professionals when appropriate.
- Establish and maintain clear professional boundaries.

These principles of professional conduct make up the ACE Code of Ethics. Any individual who registers for an ACE certification examination is agreeing to uphold the ACE Code of Ethics in his or her professional work should he or she pass the exam and earn an ACE certification. Appendix A of each ACE certification program manual is dedicated to the ACE Code of Ethics, listing the principles and providing candidates and ACE-certified professionals with a better understanding of each code and the consequences and public harm that can come from violating different principles.

ACE PROFESSIONAL PRACTICES AND DISCIPLINARY PROCEDURES

The professional practices and disciplinary procedures of the American Council on Exercise® (ACE) are intended to assist and inform certificants, candidates for certification and the public of the ACE Application and Certification Standards relative to professional conduct and disciplinary procedures. ACE may revoke or otherwise take action with regard to the application or certification of an individual in the case of:

1. Ineligibility for certification.
2. Irregularity in connection with any certification examination.
3. Unauthorized possession, use, access, or distribution of certification examinations, score reports, trademarks, logos, written materials, answer sheets, certificates, certificant or applicant files, or other confidential or proprietary ACE documents or materials (registered or otherwise).
4. Material misrepresentation or fraud in any statement to ACE or to the public, including but not limited to statements made to assist the applicant, certificant, or another to apply for, obtain, or retain certification.
5. Any physical, mental, or emotional condition of either temporary or permanent nature, including, but not limited to, substance abuse, which impairs or has the potential to impair competent and objective professional performance.
6. Negligent and/or intentional misconduct in professional work, including, but not limited to, physical or emotional abuse, disregard for safety, or the unauthorized release of confidential information.
7. The timely conviction, plea of guilty, or plea of nolo contendere in connection with a felony or misdemeanor, which is directly related to public health and/or fitness instruction or education, which impairs competent and objective professional performance. These include, but are not limited to, rape, sexual abuse of a client, actual or threatened use of a weapon of violence, the prohibited sale, distribution, or possession with intent to distribute, of a controlled substance.
8. Failure to meet the requirements for certification or recertification.

ACE has developed a three-tiered disciplinary process of review, hearing and appeals to ensure fair and unbiased examination of alleged violation(s) of the Application and Certification Standards in order to (1) determine the merit of allegations; and (2) impose appropriate sanctions as necessary to protect the public and the integrity of the certification process.

Note: As an ACE certification candidate and/or certified professional, you are deemed to be familiar with and comply with the ACE Code of Ethics and ACE Professional Practices and Disciplinary Procedures. Please contact ACE to request a complete copy of ACE Professional Practices and Disciplinary Procedures.

ACCREDITATION

In 2003, ACE's four core certifications received accreditation by the National Commission for Certifying Agencies (NCCA). The NCCA, created in 1987 by the National Organization for Competency Assurance (NOCA), is an independent non-governmental agency that accredits certification programs/organizations in a variety of professions including athletic training, dietetics, occupational therapy, nursing, and fitness, to help ensure the health, welfare, and safety of the public. The NCCA reviews the certification organization's procedures, protocols and operations, and determines if the certification properly discriminates between those who are qualified and those who are not qualified to be awarded the respective credential. The NCCA evaluates the processes and systems used by an organization to identify professional role and scope of practice, develop exam content, and provide proper exam administration and scoring to ensure the following:

- That the examination process is fair and unbiased
- That the examination accurately measures the minimal competence of the candidate for the profession
- That the public is protected from unqualified or ineffective practitioners
- That the organization has the means to support its professionals

The NCCA has 21 Standards that a certification organization must comply with in order to have a certification program be awarded NCCA Accreditation. These NCCA Standards serve as a benchmark for how organizations should conduct certification programs.

For more information about the National Commission for Certifying Agencies, please go to the NCCA web site: <http://www.noca.org/Resources/NCCAAccreditation/tabid/82/Default.aspx>

What does the NCCA accreditation standard mean to you as a fitness professional?

The International Health, Racquet and Sportsclub Association (IHRSA) and Medical Fitness Association (MFA) recommend that club owners and medical fitness facility operators hire fitness professionals with certifications that are accredited by the NCCA or an equivalent accrediting organization.

By earning an NCCA-accredited ACE certification, fitness professionals demonstrate that they meet the qualifications to take a legitimate place in the healthcare continuum within their defined scope of practice. Earning and maintaining an NCCA-accredited certification can give you a competitive advantage when being considered as a candidate for employment with a company or organization that belongs to IHRSA or MFA, as it demonstrates that you have the knowledge, skills, and abilities to provide the public with safe and effective exercise programs.

For additional information on the NCCA Accreditation of ACE certification programs, go to the ACE web site: <http://www.acefitness.org/aboutace/accreditation.aspx>

SECTION II

ACE CERTIFICATION EXAMS

ACE CERTIFICATION PROGRAMS

The American Council on Exercise has four core fitness certification programs, each with a unique population and/or programming as described below:

ACE Personal Trainer Certification (ACE-CPT)

The ACE Personal Trainer Certification is designed for fitness professionals providing one-on-one or small-group fitness instruction to apparently healthy individuals.

ACE Group Fitness Instructor Certification (ACE-GFI)

The ACE Group Fitness Instructor Certification is designed for fitness professionals teaching any form of exercise to apparently healthy individuals in a group setting.

ACE Lifestyle & Weight Management Consultant Certification (ACE-LWMC)

The ACE Lifestyle & Weight Management Consultant Certification is designed for advanced fitness professionals working with overweight and obese clients in need of programming that brings together the three critical components of long-term weight management success: exercise, nutrition, and lifestyle change.

ACE Advanced Health & Fitness Specialist Certification (ACE-AHFS)

The ACE Advanced Health & Fitness Specialist Certification (ACE-AHFS) is designed for advanced fitness professionals working with clients in need of preventative and post-rehabilitative fitness programming for cardiovascular, pulmonary, metabolic, and musculoskeletal diseases and disorders, as well as clients in special populations such as older adults, youth, and pre- and post-natal.

All ACE certification programs are continually evaluated and updated to ensure that they are up to date with the most current research and standards, and that they test candidates on the current knowledge, skills, and abilities required to be able to provide the public with safe and effective exercise programming and instruction within the scope of practice. In order to earn an ACE certification, candidates must first meet the eligibility requirement for that credential, and then must register for and pass the certification examination. ACE certifications are valid for 2 years, at which time they must be renewed through submission of appropriate continuing education, updated CPR certificate, and renewal fees. Information regarding ACE certification examinations, including eligibility criteria, registration, format, design, administration, scoring, passing criteria, professional code of conduct, and maintaining an ACE certification can be found in the sections that follow.

For more details about an ACE certification program, please review the information on the ACE web site (www.acefitness.org) or contact an ACE Education & Certification Consultant at (800) 825-3636 extension 782.

CERTIFICATION EXAM ELIGIBILITY CRITERIA

To sit for an ACE certification exam, you must meet all eligibility requirements that have been established for that particular certification exam.

| Eligibility Requirements - ACE Personal Trainer and Group Fitness Instructor Certification Exams |
|--|
| <ul style="list-style-type: none">You must be at least 18 years of ageYou must hold an adult CPR (cardiopulmonary resuscitation) certificate * |
| Eligibility Requirements - ACE Lifestyle & Weight Management Consultant Certification Exam |
| <ul style="list-style-type: none">You must be at least 18 years of ageYou must hold an adult CPR (cardiopulmonary resuscitation) certificate *You must hold a current ACE Personal Trainer, Group Fitness Instructor or Advanced Health & Fitness Specialist Certification; or an NCCA-accredited fitness related certification; or hold a four-year (bachelor's) degree in exercise science or a related field ** |
| Eligibility Requirements - ACE Advanced Health & Fitness Specialist Certification Exam |
| <ul style="list-style-type: none">You must be at least 18 years of ageYou must hold an adult CPR (cardiopulmonary resuscitation) certificate *You must hold a current ACE Personal Trainer or Lifestyle & Weight Management Certification; or an NCCA-accredited personal trainer or similar certification; or hold a four-year (bachelor's) degree in exercise science or a related field **You must have completed 300-hours of work experience designing and implementing exercise programs for apparently healthy individuals and/or high-risk individuals, as documented by a qualified professional *** |
| <p><i>* Beginning January 1, 2009, CPR and AED will both be required in the US and Canada. You may sit for an ACE pencil and paper exam without proof of CPR; however, you will not receive your results until you provide current CPR information. Candidates taking an ACE exam via Computer-based Testing must hold a current CPR certificate prior to registration.</i></p> <p><i>** Registrants holding degrees in nutrition, nursing, or health must submit documentation supporting completion of exercise science-related coursework at the time of registration.</i></p> <p><i>*** Registrants must submit documentation of 300 hours at the time of registration</i></p> |

Eligibility documentation forms for the ACE-LWMC and ACE-AHFS certification exams can be obtained at: http://www.acefitness.org/getcertified/pdfs/ces_form.pdf or by contacting ACE Exam Registration by email (ExamRegistration@acefitness.org) or phone (800) 825-3636 extension 783.

APPEALS FOR DENIED ELIGIBILITY

ACE reserves the right to reject any registration application that does not meet eligibility requirements. If a registration application for an ACE certification exam is not accepted, an individual can appeal and request the application be reviewed again. The appeal must include a detailed explanation of the reason(s) why the individual believes they should be eligible, plus all supporting documentation. All appeals should be sent to ACE Exam Registration, where they will be reviewed within 10 working days of receipt, with candidates then notified immediately in writing of approval or denial of their appeal.

ACE Exam Registration, 4851 Paramount Drive, San Diego, CA 92123
Fax: (858) 279-8064; Email: ExamRegistration@acefitness.org

EXAM CONTENT OUTLINES

Each ACE certification examination has a multiple-choice exam consisting of 150 questions; with 125 scored items and 25 experimental items. The 25 experimental items will not be scored, as they are being evaluated to determine if they perform well enough statistically to be introduced as scored items on a future exam. Only the 125 scored items count towards a candidate's finals score to determine pass or fail status on the exam. The 125 scored items are distributed according to the test specifications, called Exam Content Outlines, for the specific certification program. The Personal Trainer Certification exam also includes a Written Simulation exam, discussed later in this handbook.

Exam content outlines are updated approximately every five years, each time that ACE conducts a Job Analysis, called a Role Delineation Study, for a certification program. Exam content outlines are divided into major areas of responsibility called Performance Domains, each of which is comprised of Task Statements that detail the job-related functions under each domain. Each Task Statement is further divided into the knowledge and skills deemed necessary to perform the task in a practical setting.

Overviews of the exam content outlines for each ACE certification program can be found in the outlines and tables below, with Performance Domains labeled I-IV and the Task Statements listed under each Performance Domain. Detailed exam content outlines, with knowledge and skill statements, for each ACE certification program can be found in Appendix B of the manual for that program and all four exam content outlines can be found at: <http://www.acefitness.org/getcertified/certification-exam-content.aspx>.

ACE PERSONAL TRAINER EXAM CONTENT OUTLINE

I. Client Interview and Assessment - 32%

1. Establish rapport and program value using effective communication and listening techniques to build trust, confidence, and enthusiasm and to maximize program participation.
2. Assess client attitudes, preferences, motivations, and readiness for behavior change using questionnaires and interviews to set appropriate program goals and to identify potential barriers and unrealistic expectations.
3. Obtain health and exercise history and lifestyle information (e.g., nutrition habits, activity) using questionnaires, interviews, and available documents to determine risk stratification, to identify the need for medical clearance and referrals, and to facilitate program design.
4. Conduct appropriate baseline assessments (e.g., posture, function, cardiorespiratory fitness, muscular strength and endurance, flexibility, body composition, heart rate, blood pressure, diet, lifestyle) based on the client interview, questionnaire information, and standardized protocols to establish a safe, effective exercise program and to track changes over time.

II. Program Design and Implementation - 33%

1. Interpret the results of the client interview and assessment by evaluating responses and data to facilitate goal setting and the design of a safe and effective exercise and lifestyle program.
2. Establish specific client goals using the interpretation of interview and assessment results and current standards to provide program direction.
3. Apply appropriate exercise principles (e.g., frequency, intensity, duration, type) for cardiorespiratory fitness, muscular strength and endurance, and flexibility using current standards and appropriate techniques to develop a safe and effective exercise program.
4. Implement appropriate lifestyle modification strategies (e.g., stress management, nutrition, smoking cessation) using industry standards and best practices to improve quality of life and goal attainment.
5. Incorporate functional exercise (e.g., balance, agility, core) in accordance with scientific research to improve movement efficiency, activities of daily living, and overall physical performance.
6. Teach safe and effective techniques using a variety of methods and resources to attain desired results and to promote lifestyle modification.
7. Promote program adherence by applying the principles of motivation to maintain interest in physical activity and achievement of program goals.

III. Program Progression, Modification, and Maintenance - 27%

1. Evaluate ongoing progress using assessments, current standards, observation, and client feedback and performance to provide program direction and to optimize program adherence.

2. Identify lapses and barriers to success by reassessing baseline measures and evaluating compliance to redefine goals and to modify the program.
3. Modify program goals using appropriate educational and motivational techniques to improve compliance and awareness of the benefits of physical activity and a healthful lifestyle.
4. Implement progressions to the client's program as appropriate using established methods and techniques to facilitate goal achievement and long-term compliance.

IV. Professional Role and Responsibilities - 8%

1. Maintain a professional trainer-client relationship by adhering to legal requirements, professional boundaries, and standards of care and by operating within the scope of practice, as defined in the ACE Code of Ethics, to protect the client and to limit liability.
2. Treat all individuals with respect, empathy, and equality regardless of weight, appearance, ethnicity, nationality, sexual orientation, gender, age, disability, religion, marital status, socioeconomic status, and health status to maintain integrity in all professional relationships.
3. Maintain competence and professional growth by staying current with scientifically based research, theories, and practices to provide safe and effective services for clients, the public, and other health professionals.
4. Exercise leadership by providing direction, motivation, and education and by modeling exemplary behavior to establish an environment for client success and to promote wellness in the community.
5. Maintain an environment of continual safety by upholding industry standards to reduce the risk of injury and liability.
6. Develop risk management strategies in accordance with recognized guidelines (e.g., IHRSA, ACE, ACSM, OSHA, NSCA, state laws) to protect the client, personal trainer, and other relevant parties.
7. Document client-related data, communications, and progress using a secure record keeping system in accordance with legal requirements (e.g., HIPAA, FERPA) to maintain continuity of care and to minimize liability.
8. Participate as a member of a referral network by identifying professional contacts and community resources to ensure the highest quality of service for clients.

ACE GROUP FITNESS INSTRUCTOR EXAM CONTENT OUTLINE

I. Exercise Programming and Class Design - 49%

1. Construct a group fitness class of basic exercise components using appropriate movements, music, and/or equipment in order to promote health and wellness to class participants.
2. Accommodate varied fitness levels of participants by applying general fitness principles (e.g., varying frequency, intensity, duration, mode, sets, repetitions) in order to provide safe and effective classes.
3. Incorporate progression in class design consistent with established standards and guidelines with variation in exercise selection, equipment, music, and approach in order to achieve fitness goals, reduce potential injury and attrition, and promote alleviate boredom.
4. Accommodate the needs of special populations by recognizing their limitations and making appropriate exercise adaptations in order to provide safe and effective classes.
5. Adjust class design for various environmental conditions (e.g., cold, heat, humidity, altitude, acoustics, pollution) in order to ensure a safe and comfortable exercise setting for all participants.

II. Group Instructional Methods - 31%

1. Choose an appropriate and effective teaching method in order to accommodate various learning styles and cultural differences by analyzing the skills, interests, lifestyles, and preferences of the class participants.
2. Monitor intensity using a variety of methods in order for participants to exercise at the most appropriate levels for improving health and fitness.
3. Instruct participants using succinct and timely cues in order to prepare participants for the next movement and facilitate safe and effective exercise performance.
4. Correct improper technique using appropriate strategies in order to prevent injury and/or improve performance of participants.
5. Provide educational and motivational feedback using specific statements and demonstrations in order to maintain and improve exercise performance.
6. Provide exercise modifications in order to accommodate multiple fitness levels and special populations by demonstrating variations and options.

III. Group Leadership Methods - 14%

1. Apply interpersonal skills by interacting with participants in order to build individual rapport, relationships, and adherence.
2. Facilitate a sense of belonging by building a comfortable exercise environment for class participants in order to encourage success.
3. Motivate participants to set realistic exercise goals and take ownership of their exercise experience in order to achieve optimal results and develop a lifelong exercise habit.
4. Educate participants about lifestyle, fitness, and health using credible resources in order for participants to achieve optimal results.

IV. Professional Responsibilities - 6%

1. Adhere to applicable law and industry guidelines by maintaining a working knowledge of current principles and accepted professional practices in order to protect the interests of participants and minimize the risk of litigation.
2. Adhere to the ACE Code of Ethics by upholding its principles consistently in order to protect the interests of participants, enhance consumer confidence in the industry, and maintain professional responsibilities.
3. Respond to acute medical conditions and injuries as they arise by implementing CPR and AED, providing first aid, and obtaining necessary assistance in order to provide appropriate care and risk management.
4. Respond to emergencies as they arise by following established procedures and incident reporting requirements in order to maximize participants' safety and manage risk.
5. Protect clients and other interested parties by assessing insurance needs as they relate to group exercise instruction in order to minimize financial risk.
6. Enhance professional competence through ongoing education in current research and exercise modalities in order to optimize group fitness instruction.

ACE LIFESTYLE & WEIGHT MANAGEMENT CONSULTANT EXAM CONTENT OUTLINE

I. Client Assessment - 30%

1. Establish an environment that fosters effective communication using appropriate interview techniques to obtain accurate, comprehensive information and establish rapport.
2. Interview the client using a health risk appraisal to make appropriate test selections and determine the need for referral to an appropriate health professional.
3. Review the client's exercise, dietary, and lifestyle questionnaires using appropriate evaluation techniques to identify client goals, exercise preferences, areas for lifestyle modification, and referral to provide the basis for program development.
4. Conduct appropriate testing using accepted protocols in order to collect baseline information about the client's fitness, health, and dietary habits.

II. Program Development and Implementation - 34%

1. Determine baseline values by comparing the client's assessment data to industry standards and guidelines in order to develop an individualized program.
2. Establish effective goals based on the client's needs, preferences, expectations, and potential barriers in order to create program direction and structure.
3. Design appropriate program components consistent with industry standards and guidelines to modify behavior and ensure a safe and effective path toward goal attainment.
4. Empower the client through education about assessment information, program components, and the importance of long-term support systems in order to promote understanding, motivation, adherence, and self-efficacy.
5. Maintain rapport by employing effective interpersonal skills to encourage program adoption and adherence.
6. Instruct the client by demonstrating techniques and explaining key concepts in order to impart the knowledge and skills necessary for safe and effective program participation.
7. Facilitate client participation through observation, feedback, and the use of self-reported data in order to enhance program safety and progression toward goals.

III. Program Modification and Adherence - 29%

1. Review and discuss the client's progress toward goals in order to acknowledge achievements and identify barriers to success.

2. Consider the client's perceptions and attitudes by discussing the effectiveness of program components in order to determine areas that require modification.
3. Determine the client's current fitness levels, dietary habits, and associated lifestyle behaviors by performing ongoing assessments in comparison with previous values in order to support adherence, determine program modifications, and evaluate the need for referral.
4. Revise program goals collaboratively by revisiting client needs, expectations, and potential barriers in order to provide direction for program modification.
5. Modify the client's existing program based on ongoing assessments, goal achievement, and perceived barriers to promote sustainable lifestyle change.

IV. Professional Responsibility - 7%

1. Maintain a professional consultant/client relationship by adhering to legal and professional boundaries, standards of care, and the American Council on Exercise Code of Ethics in order to protect the client and minimize liability.
2. Assure continuing competence and professional growth by staying current with scientifically based research, theories, and practice in order to provide the most effective services for clients, the public and other health professionals.
3. Ensure the highest quality of service for clients by establishing a referral network in related disciplines and cooperating as a member of the client's health care team in order to uphold professional standards and maintain an appropriate scope of practice.
4. Treat all individuals with respect, empathy, and equality regardless of weight, ethnicity, nationality, sexual orientation, gender, age, disability, religion, marital status, socioeconomic status, and health status in order to maintain integrity in all professional relationships.
5. Document client-related data, communications, and progress using a secure record keeping system that is confidential, accurate, current, and retrievable in order to maintain continuity of care and to minimize liability.
6. Respond appropriately in emergency situations in accordance with emergency action plans in order to ensure client safety.
7. Develop risk management strategies using recognized guidelines (e.g., IHRSA, ACSM, OSHA) in order to protect the client, consultant, and other relevant parties.

ACE ADVANCED HEALTH & FITNESS SPECIALIST EXAM CONTENT OUTLINE

I. Assessment - 26%

1. Obtain health information by establishing rapport with the client, using questionnaires, and communicating with other health care providers, as indicated, in order to assess the individual's appropriateness for physical activity, facilitate program design, and identify the need for referral.
2. Gather lifestyle information using interviews and questionnaires in order to facilitate program design and optimize adherence.
3. Identify the client's readiness, expectations, and personal preferences using interviews and questionnaires in order to facilitate program design.
4. Perform baseline and periodic follow-up evaluations of physical fitness levels and physical limitations using recommended guidelines and established protocols in order to facilitate program design, ensure safety, and monitor effectiveness.
5. Maintain detailed records of assessment data using established documentation policies and procedures in order to adhere to professional guidelines and facilitate program design.

II. Program Design - 26%

1. Establish realistic and appropriate goals using the client's expectations and limitations, assessment data, and the principles of exercise science in order to develop a safe and effective program.
2. Apply the principles of exercise science by integrating the specific, measurable goals and interpreting assessment and re-assessment data in order to develop individualized, safe, and effective programs for clients with chronic disease and/or disabilities.
3. Modify the program based on re-assessment data, exercise logs, and client-reported information in order to maximize the probability of success.

III. Program Implementation and Management - 40%

1. Orient the client to an individualized program using appropriate educational techniques in order to set the foundation for program implementation.
2. Instruct the client on safe and effective exercise techniques using appropriate educational techniques in order to achieve optimal program goals.

3. Facilitate program adherence through education, the principles of behavior change, rapport building, etc., to achieve goals.
4. Monitor the client's progress and changing status based on subjective and objective data that include periodic re-assessments in order to ensure safe and effective programming.
5. Document program activity using accepted recording techniques to track progress and communicate (as necessary) with other healthcare professionals.

IV. Professional Responsibility - 8%

1. Adhere to applicable law, regulations, industry guidelines, and sound business practices by maintaining a working knowledge of these topics and/or obtaining qualified consultation as needed in order to protect the interests of clients and minimize risk.
2. Adhere to the ACE Code of Ethics by upholding its principles consistently in order to protect the interests of clients, enhance confidence in the industry, and maintain professional responsibilities.
3. Respond to acute medical conditions and injuries as they arise by providing first aid, initiating CPR, using an AED if available, and following an emergency action plan in order to provide appropriate care and risk management.
4. Maintain appropriate insurance consistent with the characteristics of the professional setting in order to protect clients and other parties.
5. Enhance competence through ongoing education in current research and exercise modalities in order to optimize professional services when dealing with special populations.

MULTIPLE-CHOICE EXAM

All four ACE certification exams have a multiple-choice exam with 125 scored items and 25 experimental items. For the ACE Group Fitness Instructor (ACE-GFI), ACE Lifestyle and Weight Management Consultant (ACE-LWMC), and ACE Advanced Health and Fitness Specialist (ACE-AHFS) Certification programs, this multiple-choice exam makes up entire credentialing exam. Only the ACE Personal Trainer Certification (ACE-CPT) has a second exam component, a Written Simulation exam consisting of two client scenarios. Candidates are given three hours to complete an ACE multiple-choice exam for any of the four ACE certification programs.

ACE employs CASTLE Worldwide, Inc., a professional testing company, to ensure that ACE certifications adhere to national testing standards. A committee of working fitness professionals write exam questions for each ACE certification exam. The committee consists of professionals who have been identified as Subject Matter Experts for that particular ACE certification program. Multiple-choice question that is developed must be referenced to an appropriate text or resource that includes ACE study materials and current industry standards, guidelines, and position papers (e.g., ACSM, AHA, ACOG, USDA). Each multiple-choice question is reviewed by three Subject Matter Experts to ensure that author wrote a question that is correct and incorrect answers that are in fact incorrect.

Three types of multiple-choice questions appear on the ACE certification exams: recall, application, and analysis. Application and analysis questions make up the majority (70 to 85%) of the questions on ACE multiple-choice exams. These questions assess the candidates' ability to solve problems and apply their working knowledge in circumstances they can expect to experience in the field. The rest of the questions on an ACE multiple-choice exam are recall questions, which are cognitive in nature and test the candidate's ability to recall knowledge. The information that follows is designed to give ACE certification exam candidates a better understanding of multiple-choice question design and the difference between recall, application, and analysis questions.

Anatomy of a Multiple-choice Question

A multiple-choice question consists of a stem and response options. The stem is a statement or a question and often includes key words to help the candidate understand what is being asked or assessed. The stem may be presented as a direct question, an incomplete statement, or a best answer format. For instance:

Direct:

What muscle flexes the elbow joint?

Incomplete statement:

The muscle that flexes the elbow joint is:

Best answer format:

Which exercise MOST effectively strengthens the flexors of the elbow joint?

Response options consist of one correct or clearly best answer and distractors (all of which are incorrect). Distractors usually contain common errors and are often drawn from the same conceptual category as the correct response. Distractors are also similar in length, complexity, grammatical construction, etc. to the correct response. For example:

Which of the following muscles is causes lateral flexion of the spine?

- A. Latissimus dorsi
 - B. Rhomboid major
 - C. Quadratus lumborum
 - D. Transverse abdominis
- (The correct answer is C)*

Recall Questions

Recall questions assess facts, terminology, and comprehension of important principles. Candidates are asked to demonstrate their ability to remember information. A relatively small number of recall questions are presented on the ACE exams since they assess the lowest cognition level. For example:

Which muscle flexes the elbow joint?

- A. bicep brachii
 - B. triceps brachii
 - C. biceps femoris
 - D. triceps surae
- (The correct answer is A)*

Application Questions

An application question poses a problem or situation that would most likely be encountered while working in the profession. Application questions assess the candidates' ability to recognize the proper use of factual information and principles in solving problems fitness professionals might experience on the job. For example:

The following question refers to the information in the table below for Sarah, a new female client:

| | |
|-------------------------|------------------------|
| Age: | 27 years |
| Height: | 5 ft. 4 in. (162.5 cm) |
| Weight: | 125 lb. (56.7 kg) |
| Lean body mass: | 90 lb. (40.8 kg) |
| Triceps measurement: | 16 mm |
| Suprailium measurement: | 25 mm |
| Thigh measurement: | 32 mm |

What is Sarah's body-fat percentage?

- A. 23 percent
 - B. 28 percent
 - C. 33 percent
 - D. 38 percent
- (The correct answer is B)*

Analysis Questions

Analysis questions assess the candidates' ability to examine information and understand the relationship between its components. In other words, how do the parts work together to make a whole? In this manner, a candidate correctly analyzing the facts can properly identify a problem and its appropriate solution. For example:

The food label on a 12-ounce bag of candy provides the following information:

| | |
|-------------------------|---------------------|
| Serving size: | 6 pieces (40 g) |
| Servings per container: | 8 |
| | |
| Amount per serving: | |
| Calories: | 160 |
| Calories from fat: | 27 |
| | |
| % Daily Value | |
| Total fat: | 3 g 4 percent |
| Saturated fat: | 0.5 g 3 percent |
| Sugars: | 30 g 11 percent |
| Protein: | less than 1 g trace |

What is the total amount and percentage of calories that come from fat in the entire bag?

- A. 27 calories, 4 percent
- B. 216 calories, 17 percent
- C. 27 calories, 17 percent
- D. 252 calories, 20 percent

(The correct answer is B)

WRITTEN SIMULATION EXAM

The Written Simulation exam applies only to the Personal Trainer Certification exam. The purpose of the ACE Personal Trainer Written Simulation exam is to test the decision-making ability of the candidate. The written simulation exam consists of two client scenarios, designed to simulate, as closely as possible, the types of situations that an actual certified personal trainer may encounter in a professional setting.

The written simulation exam consists of two booklets that the candidate receives: a Problem Booklet and an Answer Booklet:

Problem Booklet

- The problem booklet contains two problems, or client scenarios.
- Each problem begins with an introduction that provides information about the client.
- Each problem is divided into sections (approximately 4 to 8 sections per problem).
- Each section begins with an introduction/scenario that describes a set of circumstances.
- Each section also contains a list of questions/actions/decisions from which the candidate chooses those that he/she deems to be most appropriate given the circumstances at that time.

Answer Booklet

- The answer booklet is printed on latent image paper, and appears to be a set of blank pages with only answer numbers.

- After going through the possible questions/actions/decisions in a given section of the problem booklet, the candidate moves to the answer booklet where he/she indicates his/her choice of questions/actions/decisions (based on the problem) in the answer booklet by selecting the answers with the number that corresponds to the questions/actions/decisions that the candidate deems most appropriate.
- This is done by using a special latent image pen to highlight the answers that correspond to the choices selected. When a selection is made, a printed response/consequence to the action is revealed.
- An entire response to an action has been exposed when a double asterisk (**) appears.
- Once a response has been uncovered, it cannot be erased or undone, so candidates should be careful only to select responses to actions that they deemed to be most appropriate for the client at that time.

Exam Tools

- In the problem booklet, the candidate can use a pencil to help mark or order responses prior to making selections in the answer booklet.
- In the answer booklet, the candidate should use only the special latent image pen that he/she is given by the exam proctor.

Section Format

- Each section in a problem begins with a set of instructions that must be followed carefully.
- In each section, the choices appear in a random order. All of the choices should be considered before making any selections in the answer book for that section, as once a response has been selected, it cannot be erased or undone.
- The information given in a section is to be used to make decisions for the sections that follow.
- The candidate must be able to identify pertinent information. Many actions/decisions in real-life situations do not cause immediate observable results. In a similar manner, a significant number of selections (whether correct or incorrect) will reveal information that is not useful, or not useful at that time in the scenario.
- Candidates have one hour to complete both problems in the written simulation examination.

Computer-based Testing – Problem and Answer Booklets

All ACE certification exams are offered in both paper-and-pencil and computer-based testing formats. The latent image pen booklets described above are the written simulation exam format for the paper-and-pencil exam. Candidates who sit for the ACE Personal Trainer Certification exam via computer-based testing will complete a two problem written simulation exam that has the same functionality as the paper-and-pencil written simulation. Two windows will be open on the screen during computer-based testing for the written simulation exam, with the problem booklet in the window on the left, and the answer booklet in the window on the right. The problem booklet will include the same types of introductions, sections, and questions/actions/decisions from which the candidate must select those options that are most appropriate for that particular point in the scenario. The answer booklet screen will look like a blank window with only answer numbers with boxes next to them. Once the candidate has determined the actions that he/she deems most appropriate for a section, he/she should use the computer mouse to select only the boxes for the answers that correspond to the actions that he/she has deemed most appropriate. Once selected, the answer will reveal the printed response/consequence to the action. As with the paper-and-pencil format, once a written simulation answer is selected, it cannot be erased or undone.

Written Simulation Sample Problem and Resources

ACE has a sample written simulation on its website to familiarize candidates with the unique testing technique used in this type of examination. ACE also has a PowerPoint demonstration and instructions to

help candidates better understand the written simulation portion of the ACE Personal Trainer Certification exam. To access these resources, go to the Written Simulation portion of the ACE website at:
<http://www.acefitness.org/getcertified/writtensim.aspx>

TEST-TAKING STRATEGIES FOR ACE CERTIFICATION EXAMS

Keep the following in mind as you prepare for the ACE certification exams.

1. Quality hands-on experience is probably one of the strongest predictors for passing the ACE certification exams, perhaps because of the number of application and analysis questions. Those who lack experience in designing exercise programs or leading exercise in a group setting may be at a disadvantage. If candidates are presented with a question that assesses an area in which they have no experience, they may select response options based solely on their opinions or biases.

As mentioned, all exam questions have only one correct answer and three plausible distractors. Candidates with more experience are better able to discriminate the plausibility of all response options (in other words, see through the smoke) and recognize the correct answer with little difficulty. Those lacking experience may be left to guess, and when two or three response options appear to be equally plausible, they may find the question somewhat tricky.

2. Specific exam preparation

All exam questions are based on an Exam Content Outline (found in the appendix of each respective ACE manual). The Exam Content Outline lists the specific knowledge base upon which questions are written. Each Exam Content Outline is derived from a formal role delineation study (job analysis) for personal trainers, group fitness instructors, lifestyle & weight management consultants, and advanced health & fitness specialists. Similar to the principle of specificity of exercise training, candidates are better served if they guide their study to these knowledge statements. This way, candidates can determine deficiencies in theory or practical experience.

Familiarity with the Exam Content Outline can also help alleviate test anxiety. Candidates unfamiliar with the Exam Content Outline may have the misconception that the ACE exams are anatomy and physiology-based or that only the information presented in the ACE manuals will be assessed.

Though the ACE manuals for personal trainers, group fitness instructors, lifestyle & weight management consultants, and advanced health & fitness specialists are widely respected, keep in mind that they should be considered helpful resources, rather than the sole authority. Candidates do themselves and the industry a disservice if they believe that studying an ACE manual alone is a comprehensive resource for their fitness knowledge.

Test-taking Strategies to Help Make the Grade

The following are strategies for taking the ACE certification exams as well as other standardized tests:

- Pace yourself and make efficient use of your time. You should be halfway through the exam (or slightly more) when half of your time is up.
- Answer the easy questions first. More difficult questions can always be answered later.
- Read each question carefully and avoid skimming or speed-reading. Be sure you understand what the question is asking. Underline key or bolded phrases: BEST, MOST, etc.
- Try to anticipate what the answer is but still read all response options carefully before finalizing an answer. Remember that there is only one correct answer and two response options may appear to be similar without careful reading.
- Don't overanalyze or read into the question. Each question is written as clearly as possible and should be interpreted as it appears. There is no hidden meaning or attempt to be tricky.

- Eliminate the least plausible response options. Eliminating one or two response options will increase your chances of selecting the correct answer with an educated guess.
- Take care in marking your answer sheet. Be sure that the question you are working on in your exam booklet corresponds to the mark you are making on your answer sheet.
- Answer every question. Remember, there is no penalty for guessing.
- Although first impressions are best, change your answer if you feel strongly about it.
- Response options on the ACE exams are randomized. If you know absolutely nothing about a question, it is best to simply guess and move on.

STUDY RESOURCES

While candidates are not required to purchase any ACE study materials to prepare and sit for an ACE certification examination, ACE does offer a variety of free and for purchase study resources that can be purchased as packages or ala carte to meet the needs of each individual. These resources include:

- Manuals for each certification program (ACE Personal Trainer, ACE Group Fitness Instructor, ACE Advanced Health & Fitness Specialist, and ACE Lifestyle & Weight Management Consultant)
- Workbooks for each manual
- Printed sample tests
- Printed Personal Trainer written simulation sample problem
- FREE study coach programs with weekly emails with learning objectives to candidates moving towards their goals
- Home study kits with flashcards, audio CD's and a workbook
- Online diagnostic practice tests
- Live exam review workshops (Personal Trainer)
- Online exam review courses (Personal Trainer and Group Fitness Instructor)
- FREE home study questions
- FREE written simulation sample
- FREE written simulation PowerPoint slideshow to help candidates gain a better understanding of the written simulation as a testing format
- ACE Education Consultants and ACE Resource Center, both are available for questions as you study. They can help you gain a better understanding of the content as study, but they are not able to provide you with any specific test information.
- ACE Study Assistance Program. This FREE program is designed to help candidates who were not successful on an ACE exam to understand their detailed score reports so they can focus their studies in the areas where they have the greatest room for improvement.

For more information about preparing for the exam, select the certification page for the certification exam you are planning to take (<http://www.acefitness.org/getcertified/default.aspx>) or contact an ACE Education Consultant at 800-825-3636.

EXAM ADMINISTRATION

ACE offers live paper-and-pencil examinations and computer-based testing for all four certification programs. ACE schedules live quarterly paper-and-pencil certification examinations at cities across the US, Canada, and at international locations around the world four times a year (February, May, August and November). ACE also schedules additional “off-quarter” examinations at select sites, colleges and universities, and fitness industry conferences throughout the year as needed. Live paper-and-pencil exams are managed by CASTLE Worldwide, Inc., the testing service company that ACE contracts for the development, administration, and scoring of ACE certification program exams. Live paper-and-pencil

exams are administered by proctors, hired and trained by CASTLE Worldwide, Inc., to groups of candidates in classroom settings.

ACE certification exams administered via computer-based testing (CBT) are also managed by CASTLE Worldwide, Inc., with CBT exams offered at over 300 computer-based testing facilities throughout the US. CASTLE Worldwide, Inc. contracts the computer-based testing facilities to offer ACE certification exams, requiring proctors to go through training to ensure the same quality of proctoring that occurs at the live paper-and-pencil exams. Proctors for computer-based testing facilities use video, windows, and direct observation to ensure that candidates are not in violation of ACE testing or security rules.

ACE offers live paper-and-pencil exams at over 80 cities in more than 15 countries per year, and at more than 275 computer-based testing facilities throughout the US. Both live and CBT exams have the same format of 150 multiple choice questions per exam, with three hours to complete this section of the exam, plus a written simulation exam for the ACE Personal Trainer Certification with candidates having one hour to complete the two problems/scenarios in the written simulation exam.

EXAM SCORING AND PASSING CRITERIA

ACE examinations are scored according to procedures accepted by the American Psychological Association, the American Educational Research Association and the National Council on Measurement in Education. The candidate's score is derived from the number of questions answered correctly and reported as a scaled score between 200 and 800 with a minimum passing score set at 500. Candidate scores are adjusted to equalize the difficulty of passing of all versions of examinations for an ACE certification program. This step is intended to ensure that candidates must reach the same level of competency to achieve a passing score of 500 on any exam in the same certification program. This benefits the candidate by keeping the passing criteria at a similar level of difficulty and benefits the public by maintaining at set criteria for minimum level of competency to earn an ACE certification.

Each multiple-choice examination consists of 150 items, but only 125 of the scored items contribute towards the candidate's score. The remaining 25 items are considered field or experimental items and are analyzed for consideration for future ACE examinations. Each examination item is statistically analyzed to determine item performance. This includes measures of item discrimination (between strong and weak candidates), plausibility, and general difficulty. As described above, each multiple choice exam is scored, scaled to a score between 200 and 800, with the minimum passing score set at 500, and equated to equalize the difficulty of passing all versions of the multiple choice exam for the given certification program. For the ACE Group Fitness Instructor, Lifestyle and Weight Management, and Advanced Health and Fitness Specialist Certification exams, this concludes the scoring for these exams, with candidates achieving a final scaled score of 500 points or more earning the ACE certification for the exam which they sat. For the ACE Personal Trainer Certification, this multiple choice score counts for only 75% of the total scaled score.

The personal trainer examination contains an additional component; a two-problem written simulation exam that contributes 25% towards the final score. Within the written simulation, scoring is divided into 5 possible categories:

- **“Clearly Indicated”** choices are considered essential to the outcome of the personal trainer-client relationship. The candidate scores maximal positive points for selecting these options. As these items are critical to the outcome, failure to select these items will result in the candidate being awarded the negative point value of that missed response.
- **“Indicated”** choices are considered important to the outcome of the personal trainer-client relationship. The candidate scores positive points for selecting these options.
- **“Neutral”** choices are items that will not benefit nor harm the outcome of the personal trainer-client relationship. These items are not allocated any point value.
- **“Contraindicated”** choices are considered harmful to the outcome of the personal trainer-client relationship. Selecting these options scores the candidate negative points.

- **“Clearly Contraindicated”** choices are considered critically harmful to the outcome of the personal trainer-client relationship. Selecting these options scores the candidate maximal negative points.

Scoring of each written simulation problem is cumulative, implying that the total of all positive and negative scores are added together to achieve a final score for each simulation problem. The final score for each simulation problem is then adjusted for difficulty and reported as a scaled score between 200 and 800. Each simulation problem contributes 12.5% towards the candidate’s final score, with the full written simulation exam totaling 25% of the ACE Personal Trainer exam final scaled score. In order to pass the ACE Personal Trainer Certification exam, a candidate must have a combined scaled score, from the multiple-choice and written simulation exams, that is equal to or greater than 500 points.

EXAM RESULTS

All paper-and-pencil exams are sent to CASTLE Worldwide, Inc. for scoring. Upon completion of scoring, CASTLE transfers all exam scores to ACE within four to six weeks of the exam date. Concurrent with this data transfer to ACE, CASTLE mails individual score reports to all examination candidates who have no current registration holds. Once received, ACE merges the examination results into its database and then posts a more detailed diagnostic score report into the web account of each candidate. These detailed score reports are accessible by the candidate via his/her password protected ACE web account only if the candidate’s account is free of holds. Candidates with outstanding registration holds, such as CPR documentation not on file, or those issued holds by virtue of being selected to ACE’s quarterly CPR audit (5% of examinations candidates) will not be able to view nor receive their results until the hold is cleared.

CBT candidates receive their results immediately after completing their examination; hence they have the requirement to submit verification of current CPR prior to CBT registration. Once CBT results are received by CASTLE, they transfer the exam score to ACE, where the examination result is merged into ACE’s database and then posted as a detailed diagnostic score report into the candidate’s web account.

Candidates who achieve a final scaled score of 500 or more points on their certification exam will be awarded the ACE certification for the exam that they successfully passed. Candidates who pass their ACE exam will receive their certification within two to three weeks after the scores are released, either by CASTLE for candidates with no holds or by ACE following a candidate clearing his/her holds. Candidates proving unsuccessful in passing the examination may elect to enter the ACE Study Assistance Program in order to review their diagnostic score report with an ACE Education Consultant to identify weaknesses in subject matter and implement strategies to better prepare in the event they decide to re-take the examination.

EXAM SCORING APPEALS

Should a candidate feel that their examination effort was negatively impacted by improper instruction, unprofessional proctoring standards, unreasonable environmental distracters or other distracters, they must report their grievance to the Test Site Administrator immediately. The TSA will document the complaint and submit it to CASTLE Worldwide, Inc. where the complaint will be forwarded to the ACE Certification Manager for further investigation. Following any examination administration where a candidate feels that his/her examination effort was negatively impacted, ACE mandates that candidates submit written notification to ACE Exam Registration of an incident and how it negatively impacted performance within 30 days of the examination. The ACE Certification Manager will make an equitable decision based upon the information gathered from all relevant sources.

EXAM RESCORING

Should a candidate not pass the examination, yet believe that a scoring error was involved during the computer scoring, he or she may appeal and request to have their entire examination manually rescored. While the results of a manually scored examination rarely, if ever, differ from the result obtained through the automated process, the candidate does have the right to make that decision. In order to request a manual rescore, candidates must contact ACE Exam Registration at 800-825-3636 extension 783; or via email at examregistration@acefitness.org) to receive a manual rescore form. Candidates must then submit the completed form, along with the \$50.00 rescoring fee to CASTLE. All requests for a manual rescore must be made within 6 months of the original examination date. CASTLE will inform the candidate of their rescored results within two to four weeks of receiving the rescore request.

EXAM SCORE CANCELLATION

Candidates may cancel their scores by writing to CASTLE no later than seven days after the examination to request that their paper and pencil exam not be scored. No refunds are given to candidates who request their scores be canceled. Requests should be sent to:

CASTLE Worldwide, Inc.
Attention: Scoring Department
900 Perimeter Park Drive, Suite G
Morrisville, NC. 27560 USA
Phone: 919-572-6880
E-mail: info@castleWorldwide.com

PASS RATES FOR ACE EXAMS

Registered Candidates, Scored Exams, & Pass Rates for All ACE Examinations (by Fiscal Year)

| Personal Trainer | Registered | Scored | Passed | Passing% |
|------------------|------------|--------|--------|----------|
| 7/1/07 - 6/30/08 | 8,891 | 7,693 | 5,177 | 67.29% |
| 7/1/06 - 6/30/07 | 8,342 | 7,164 | 4,593 | 64.11% |
| 7/1/05 - 6/30/06 | 9,310 | 7,548 | 4,562 | 60.44% |
| 7/1/04 - 6/30/05 | 9,940 | 7,704 | 4,907 | 63.70% |
| 7/1/03 - 6/30/04 | 10,298 | 8,362 | 5,506 | 65.85% |
| 7/1/02 - 6/30/03 | 10,821 | 9,318 | 6,139 | 65.88% |
| 7/1/01 - 6/30/02 | 10,936 | 9,782 | 6,262 | 64.02% |
| 7/1/00 - 6/30/01 | 10,010 | 8,910 | 5,499 | 61.72% |
| | | | | |

| Group Fitness Instructor | Registered | Scored | Passed | Passing% |
|--------------------------|------------|--------|--------|----------|
| 7/1/07 - 6/30/08 | 1,546 | 1,313 | 1,062 | 80.88% |
| 7/1/06 - 6/30/07 | 1,665 | 1,433 | 1,186 | 82.76% |
| 7/1/05 - 6/30/06 | 1,569 | 1,377 | 1,041 | 75.60% |
| 7/1/04 - 6/30/05 | 1,784 | 1,386 | 1,108 | 79.94% |
| 7/1/03 - 6/30/04 | 1,810 | 1,425 | 954 | 66.95% |
| 7/1/02 - 6/30/03 | 1,980 | 1,610 | 979 | 60.81% |
| 7/1/01 - 6/30/02 | 2,056 | 1,748 | 1,123 | 64.24% |
| 7/1/00 - 6/30/01 | 1,976 | 1,644 | 1,115 | 67.82% |

| Lifestyle & Weight Management Consultant | Registered | Scored | Passed | Passing% |
|--|------------|--------|--------|----------|
| 7/1/07 - 6/30/08 | 430 | 396 | 288 | 72.73% |
| 7/1/06 - 6/30/07 | 456 | 409 | 298 | 72.86% |
| 7/1/05 - 6/30/06 | 481 | 423 | 327 | 77.30% |
| 7/1/04 - 6/30/05 | 532 | 437 | 333 | 76.20% |
| 7/1/03 - 6/30/04 | 509 | 443 | 359 | 81.04% |
| 7/1/02 - 6/30/03 | 515 | 452 | 357 | 78.98% |
| 7/1/01 - 6/30/02 | 786 | 689 | 496 | 71.99% |
| 7/1/00 - 6/30/01 | 647 | 571 | 413 | 72.33% |

| Advanced Health & Fitness Specialist | Registered | Scored | Passed | Passing% |
|--------------------------------------|------------|--------|--------|----------|
| 7/1/07 - 6/30/08 | 203 | 182 | 111 | 60.99% |
| 7/1/06 - 6/30/07 | 203 | 180 | 110 | 61.11% |
| 7/1/05 - 6/30/06 | 185 | 163 | 108 | 66.26% |
| 7/1/04 - 6/30/05 | 195 | 146 | 91 | 62.33% |
| 7/1/03 - 6/30/04 | 268 | 211 | 154 | 72.99% |
| 7/1/02 - 6/30/03 | 268 | 211 | 154 | 72.99% |
| 7/1/01 - 6/30/02 | 243 | 222 | 164 | 73.87% |
| 7/1/00 - 6/30/01 | 211 | 171 | 109 | 63.74% |

SECTION III

EARNING AN ACE CERTIFICATION

EXAM REGISTRATION: PAPER-AND-PENCIL TESTING

Candidates registering for live paper-and-pencil examinations may utilize one of the following registration options:

- Online - Due to additional eligibility requirements, this format is permissible only for the ACE Personal Trainer and Group Fitness Instructor Certification exams, and for currently ACE-certified professionals registering for the Lifestyle and Weight Management Consultant Certification exam.
- Phone registration - Permissible for all ACE certification exams based on eligibility criteria.
- Mailed or faxed application - Permissible for all ACE certification exams based on eligibility criteria.

Before registering for an ACE examination candidates must meet the eligibility criteria for the ACE certification exam they wish to take. Candidates can register for a paper-and-pencil exam without having current CPR on file, however, they will not receive their exam results until they provide this information.

The online registration deadline for paper-and-pencil examinations is 30 days prior to the exam date, while the mail and fax registration deadline is 45 days prior to the exam date.

PAPER-AND-PENCIL SPECIAL ACCOMMODATIONS

Candidates with special testing needs will be accommodated as best as possible. All requests must be accompanied by supporting documentation and received by the ACE Exam Registration Department no later than 60 days prior to the exam date.

- ***Military Personnel and Dependents – Domestic and International:***
Candidates are able to take the examination at a DANTES military test center. Candidates must include with their registration application, a letter from the DANTES Test Control Officer (TCO) on military letterhead which specifies candidate name, examination date, examination type, DANTES four-digit test center code, shipping address for examination materials, and TCO contact information.
- ***Religious Obligations:***
ACE quarterly and additional certification examinations are traditionally administered on Saturdays. If a Saturday attendance conflicts with religious obligations, ACE will try to arrange an alternative examination date if documentation from the appropriate clergyman is provided.
- ***Limited English Proficiency:***
The ACE Personal Trainer certification examination is currently offered in English, Spanish and Thai. If none of these languages qualify as a first language, the candidate may request additional time to take the exam. Documentation such as a copy of a birth certificate or passport must be submitted as verification and qualification for additional time.
- ***Disabled Candidates:***
Special accommodations will be made to the best abilities of ACE, CASTLE Worldwide, Inc. and the testing for candidates with visual, sensory, physical or other disabilities that prevent them from taking the examination under standard conditions. According to the Americans with Disabilities Act (ADA), documentation of the disability must be submitted by a professional qualified to diagnose the disability. Requests and completed registration information from disabled candidates must include a description of the accommodation requested. ACE reserves the right to determine if the requested accommodation is reasonable.

- **Additional Requests:**

Accommodations can be made if a candidate has other special requests that are not listed above. Documentation of this special need, made by a professional qualified to make a diagnosis, must be submitted with the request. ACE reserves the right to determine if the requested accommodation is reasonable.

EXAM REGISTRATION: COMPUTER-BASED TESTING (CBT)

Candidates registering for computer-based testing (CBT) may utilize one of the following options:

- Online - Due to additional eligibility requirements, this format is permissible only for the ACE Personal Trainer and Group Fitness Instructor Certification exams, and for currently ACE-certified professionals registering for the Lifestyle and Weight Management Consultant Certification exam.
- Phone registration - Permissible for all ACE certification exams based on eligibility criteria.
- Mailed or faxed application - Permissible for all ACE certification exams based on eligibility criteria. Due to the timeliness of registration for and confirmation of computer-based testing due to seat availability at the internet-based testing facilities, mailed and faxed applications must be confirmed via phone registration.

While the same general eligibility criteria apply, the pre-requisite of holding a current CPR certificate with CPR information on file with ACE is mandatory. As examination results are immediately provided with CBT, candidates cannot register for an ACE certification examination without first submitting verification of a current CPR certificate.

Candidates can register for CBT examinations as early as 15 days prior to the date of the exam, and as far out as 6 months in advance of the exam date. Once a candidate registers for a CBT examination, the requested examination location and timeslot requires approval through the third-party contracted testing centers. The confirmation process for CBT exam registrations is an automated process, with e-mail confirmation of registration dates being either approved or unavailable generally received by candidates within minutes of submitting their registration. On occasion, when there are technical issues, this process can take up to 2 - 3 business days following registration. Once a candidate's preferred examination choice is approved, the candidate is subject to ACE's reschedule and cancellation policy. If the preferred examination choice is unavailable, the candidate may request new choices through the ACE Exam Registration portal at no additional charge.

CBT SPECIAL ACCOMMODATIONS

Candidates with a special testing need will be accommodated as best as possible. Given the limitations of the third-party contracted computer testing facility, accommodations are restricted to the provision of additional time only, and approved by ACE with the submission of the appropriate documentation. Should this provision not satisfy the needs of the candidate, he or she must then opt to take a live paper-and-pencil examination where additional special accommodations can be provided.

INTERNATIONAL EXAMS

ACE offers its four certification exams at numerous testing locations around the world on an annual to quarterly basis. All ACE exams delivered internationally are administered via paper-and-pencil exam format, and follow the same rules as domestic paper-and-pencil exams. For a listing of cities and dates where ACE exams will be offered outside the US, please go to the ACE website at:

<http://www.acefitness.org/certificationexams/default.aspx>

STAND-BY CANDIDATES

If a candidate is unable to register for the Personal Trainer or Group Fitness Instructor Certification exam by the registration deadline, they may choose to attend the exam as a walk-in candidate and pay the

additional \$25.00 administrative fee. However, this does not guarantee a seat as walk-in candidates are registered in order of arrival and as space and resources permit. Walk-in registration begins at 8 a.m. on the date of the exam for all candidates. Any individual attempting to sit the examination as a stand-by candidate must bring:

- A completed stand-by registration form which can be obtained directly from ACE Exam Registration by calling (800) 825-3636, emailing examregistration@acefitness.org, or downloaded from the ACE web site (http://www.acefitness.org/getcertified/pdfs/standby_reg_form.pdf)
- Two forms of identification, including a photo ID with signature
- A certified (cashier's) check or money order made payable to the "American Council on Exercise" for the appropriate examination fee (credit cards or personal checks will NOT be accepted at the exam site)
- Two soft-lead (#2) pencils and an eraser
- Extra layers of clothing for comfort in the exam center

Due to the additional eligibility requirements for the Advanced Health and Fitness Specialist and Lifestyle and Weight Management Consultant Certification, these candidates are not able to be accommodated on a walk-in basis. Candidates for the Advanced Health and Fitness Specialist and Lifestyle and Weight Management Consultant Certification exams do have the option, if space and resources permit, to provide documentation for all eligibility criteria to the ACE Exam Registration Department and then pre-pay the standard exam registration fee plus the \$25.00 walk-in fee. In these situations, the candidate would be issued a pre-paid walk-in candidate exam registration letter on ACE letterhead to submit to the proctors on the exam day. Proctors would also receive advanced notice from ACE and CASTLE that the pre-paid walk-in candidate will be attending.

Walk-in registrations are also not permitted at international test administrations outside the US and Canada. International candidates for all ACE certification exams do have the option, if space and resources permit, to provide documentation for all eligibility criteria to the ACE Exam Registration Department and then pre-pay the standard exam registration fee plus the \$25.00 walk-in fee, according to the procedures described above.

EXAM FEES

For paper-and-pencil examinations, ACE will only register candidates that submit a completed registration application and payment in full by the respective registration deadline. Checks or money orders should be in U.S. funds, drawn on a U.S. bank, and payable to ACE. ACE does not accept cash, purchase orders or invoices and will return all incomplete registration applications and/or registration applications with cash, purchase orders, invoices, declined credit cards or returned checks. Active military, veterans and eligible spouses and dependents can receive reimbursement for their ACE exam fees from the government by submitting appropriate paperwork as directed at <http://www.gibill.va.gov/>; this includes both first time and retakes fees.

ACE Paper-and-Pencil Examination Fees

| Paper & Pencil Format (U.S. and Canada) | PT | AHFS | GFI | LWMC |
|---|-------|-------|-------|-------|
| First Time | \$219 | \$219 | \$200 | \$219 |
| Retake | \$135 | \$135 | \$135 | \$135 |
| 2nd ACE Certification | \$150 | \$150 | \$150 | \$150 |
| Paper & Pencil Format (Mexico) | PT | AHFS | GFI | LWMC |
| First Time | \$165 | \$165 | \$165 | \$165 |
| Retake | \$135 | \$135 | \$135 | \$135 |
| 2nd ACE Certification | \$150 | \$150 | \$150 | \$150 |

* International examination fees outside of Canada and Mexico are structured according to the World Bank Gross National Index scores. For more information on international exam pricing, contact the ACE Exam Registration Department at 888-825-3636 extension 783, or ExamRegistration@acefitness.org.

ACE Paper-and-Pencil Examination Fees: Stand-by Candidates

| Paper & Pencil Format (not available in Mexico) | PT | AHFS | GFI | LWMC |
|---|-------|------|-------|------|
| First Time | \$244 | N/A | \$225 | N/A |
| Retake | \$160 | N/A | \$160 | N/A |
| 2nd ACE Certification | \$175 | N/A | \$175 | N/A |

*Note: Due to the additional eligibility requirements for the LWMC and CES certifications we are not able to accommodate any candidate for standby testing.

ACE Computer-based Testing Examination Fees

| Computer-based Format (Only available in U.S.) | PT | AHFS | GFI | LWMC |
|--|-------|-------|-------|-------|
| First Time | \$249 | \$249 | \$249 | \$249 |
| Retake | \$184 | \$184 | \$184 | \$184 |
| 2nd ACE Certification | \$199 | \$199 | \$199 | \$199 |

RESCHEDULING: PAPER-AND-PENCIL EXAM

If a candidate is unable to sit for a domestic examination on the date they are registered, for any reason, they must reschedule to avoid forfeiture of their entire examination fee. In order to reschedule the candidate must complete the reschedule form online by 11:59 p.m. Pacific Time (PT) on the day preceding their examination, reschedule for an examination within the next six months, and pay a \$135.00 reschedule fee. Failure to reschedule within the specified timeline and not taking the examination will result in forfeiture of their entire examination fee.

Candidates may only reschedule their examination date once and may only reschedule for another paper-and-pencil format exam. Candidates who fail to take the examination on the rescheduled date will forfeit their entire exam fee. No refunds are issued for examinations that have been rescheduled.

Given the infrequent administration of international examinations, rescheduling an international examination is not permitted. International candidates who fail to attend their registered examination forfeit the registration fee in its entirety.

If a candidate opts to sit the examination at a different site than where initially registered, they must fax or mail a written request to ACE Exam Registration prior to the 30-day registration deadline to be considered a regularly-enrolled candidate at the new site. If the request is received within 30 days of the examination, the candidate is considered a stand-by and must pay a \$25.00 site transfer fee. By submitting a request after the 30-day deadline, the candidate recognizes that this qualifies them as a walk-in candidate at the new location and does not guarantee a seat.

RESCHEDULING: COMPUTER-BASED TESTING

If a candidate is unable to sit for an examination on the date they are registered, for any reason, they must reschedule to avoid forfeiture of their entire examination fee. In order to reschedule the candidate

must log into their ACE account and select new first and second examination date choices by 11:59 p.m. PST on the day preceding their examination and pay a \$149.00 reschedule fee.

Candidates may only reschedule their examination date once and may only reschedule for another CBT format exam. Candidates rescheduling to a later CBT date will receive an approval or unavailability email notification within 2 - 3 business days of submitting the new examination request. If the candidate's preferred dates are unavailable, the candidate will be prompted to select new date options.

Exceptions to the reschedule fee will be considered on a case-by-case basis for documented cases of serious illness, bereavement, natural disasters, and other emergencies. In these instances, candidates must contact ACE Exam Registration prior to or the day of the exam date. Candidates must then provide an electronically date-stamped or postmarked reschedule request and select a new date to sit the exam. No refunds will be given for rescheduled exams.

REFUNDS

If a candidate is unable to sit for the examination after registering, the candidate has the option to reschedule the exam or request a cancellation of the exam registration. Candidates who cancel an exam registration may request a 50% refund of the examination fee. To apply for a refund, the candidate must submit a written request to ACE postmarked or electronically date-stamped no later than 30 days prior to the scheduled examination date. No refunds will be given after the 30-day registration deadline. International examination candidates are not eligible for refunds.

Exceptions to the refund deadline will be considered on a case-by-case basis for documented cases of serious illness, bereavement, natural disasters, and other emergencies. In these instances, candidates must electronically date-stamp or postmark their request no later than 30 days after the examination date and provide any and all supporting documentation. With proper documentation, candidates will be offered the option to apply their examination fee towards a future registration to be scheduled within the next six months, or they can request a full refund of examination fees. No refunds will be given for rescheduled exams.

EXAM RETAKES

Candidates who do not pass a certification examination are eligible to sit for the exam another time for the retake fee of \$135.00 for paper-and-pencil and \$184.00 for CBT for a period of one year after the date of the initial examination. For retake examinations, candidates have the option to select either paper-and-pencil or CBT exam format, and will be charged the appropriate fee for the format selected. After this one-year period, the candidate must submit the first-time candidate exam fee.

EXAM DELIVERY AND SECURITY

Both examination formats are delivered by CASTLE Worldwide, Inc., the testing service ACE contracts to provide the development, security, delivery, and scoring of all ACE certification exams. CASTLE utilizes an extensive network of examination testing site administrators (TSA), proctors, and live and computer-based testing centers.

CASTLE assumes responsibility for all exam administration arrangements and provisions for special-exam accommodations as needed. They will ensure that all examination centers conform to local building, sanitation, ADA, health and safety codes, and are maintained in good, clean condition. CASTLE will train testing site administrators to provide a site that has accessible parking spaces within reasonable distance to the examination rooms, examination rooms that are quiet, free from any known environmental distractions and interruptions, and comfortable in temperature.

Every attempt, within reason, is made to ensure a quiet and comfortable testing environment for all candidates. However, last minute needs and emergencies by building operators cannot be anticipated. We suggest that you bring appropriate clothing with you (i.e., sweat shirt) to help you adapt to a cooler or warmer climate in the examination room. Bring earplugs if you are very sensitive to noise distractions.

PAPER-AND-PENCIL EXAM ADMINISTRATION AND SECURITY

Candidates are mailed admission tickets approximately two weeks prior to the examination date and must bring the following to the examination location:

- Admission ticket
- Two forms of identification, including a photo ID with signature
- Two soft lead (#2) pencils and an eraser

The examination room(s) must be large enough to comfortably accommodate the anticipated number of pre-registered candidates in standard classroom or theater style seating. To ensure adequate separation among candidates taking the exam in a classroom-style setting, 6 to 8 foot (2 - 2.7 m) tables must be arranged with two candidate seats per table at a minimum distance of 48" (1.2 m) between adjacent seats, measured center-to-center from each seat; or allow at least one empty seat between candidates and with candidates seated directly behind one other in a theater-style setting.

Every attempt within reason is made to ensure a quiet and comfortable testing environment for all candidates. However, some environmental distracters cannot be anticipated. Candidates are encouraged to bring appropriate clothing to help adapt to cooler or warmer examination rooms and to bring ear plugs if one is sensitive to noise distractions.

Only the individual named on both the admission ticket and registration roster and whose name on the photo identification matches the registration roster will be permitted to take the examination. This naturally excludes those candidates attempting to take the examination as a stand-by as their name is not on the roster, except in cases where the candidate has printed and completed the appropriate stand-by paperwork from the ACE web site and has all mandatory items including payment in the form of a certified (cashier's) check or money order made payable to the American Council on Exercise for the correct amount. Candidates are strongly advised to contact ACE if an admission ticket is lost or misplaced, or in the event that it is not received within one week prior to the examination date. Failure to notify ACE may prohibit entry into the examination center.

For paper-and-pencil examinations, the following timelines will be adhered to unless otherwise noted on the admission tickets:

| | |
|----------|--|
| 7:30 am | Test Site Administrator and Proctors report to site |
| 8:00 am | Multiple Choice Exam registration (all certifications) |
| 8:40 am | Multiple Choice Exam instructions are given |
| 9:00 am | Multiple Choice Exam begins (all certifications) |
| 12:00 pm | Multiple Choice Exam ends |
| 12:45 pm | Written Simulation Exam registration (Personal Trainer certification only) |
| 1:10 pm | Written Simulation Exam instructions are given |
| 1:30 pm | Written Simulation Exam begins (Personal Trainer certification only) |
| 2:30 pm | Written Simulation Exam ends |

Candidates have three hours to complete the 150-multiple-choice question exam unless provided with special time accommodations. Additionally, candidates sitting for the Personal Trainer certification will have one-hour to complete the written simulation examination following the multiple-choice exam.

All candidates must report to the examination site no later than 8:00 am on the day of the examination. Exam instructions will begin no later than 8:40 am for all examinations and 12:45 pm for the personal trainer written simulation examination. Candidates must arrive on time, as no one will be allowed admission after the examination instructions have begun. Candidates are required to adhere to the following examination policies:

- No visitors are allowed in the examination rooms.
- Candidates must perform all of their own work, without assistance. Sharing information or disturbing others is cause for dismissal with no refund.
- Impersonating another candidate, giving or receiving help on the exam, or removing exam materials or notes from the examination site is cause for dismissal with no refund.
- No dictionaries, calculators, paper or other supplies are allowed during the exam.
- No purses, bags, or any powered communication devices such as cell phones and PDA's etc. are allowed in the examination room.
- No food or drinks are allowed in the examination room unless approved in advance by ACE for medical reasons.

Candidates may be disqualified from taking or continuing forward in the examination process, or from receiving exam results, if ACE, CASTLE and/or the examination proctor determine, either through direct observation or through statistical analysis that the candidate engaged in collaborative, disruptive, cheating, or other unacceptable behavior before, during or following the administration of the ACE exam.

COMPUTER-BASED TESTING ADMINISTRATION AND SECURITY

Candidates registered for a CBT exam will receive an e-mail notification from ACE instructing them to download and print out their admission ticket once their selected examination date, site and time have been approved. This email will be sent no later than two weeks prior to the registered examination date. On the day of the examination, candidates must report to the testing center no later than 15 minutes prior to the registered start time indicated on the admission ticket and provide the necessary documentation to verify identification. CBT candidates are expected to adhere to the same examination policies as outlined for paper-and-pencil testing.

Computer-based examinations are administered in separate rooms with a closeable door to minimize potential distractions to the candidates. The proctor will monitor activity from within the examination room, via direct observation through an unobstructed window view, or via video surveillance. Many CBT facilities have rooms with more than one testing station per examination room, with adequate space, or partitions between testing stations.

Computer-based testing centers provide exam administration services for multiple credentialing exams. These exams can be of different lengths, have different start times, and have different rules than ACE certification exams. All attempts will be made by the testing center to provide a calm, quiet, testing experience. Candidates who are sensitive to noise and occasional distractions may want to bring earplugs or similar to mitigate ambient noise.

CONFIDENTIALITY POLICY

The purpose of the ACE examinations is to protect the public and other stake-holders against ineffective practices and procedures. The examinations are intended to ensure minimal entry-level competency of fitness professionals. Sharing of examination information with and between candidates, compromises the validity of the examination. Consequently, in order to maintain the integrity and security of all ACE examinations, examination questions, answer sheets, answers, or other source materials are never released to candidates under any circumstance.

Candidates are expected to prepare and pass examinations on their own merit. Candidates who intentionally pursue examination information beyond what is legally and ethically shared by ACE and ACE employees, including pursuit of previous examination candidates, are considered to be engaging in unethical and illegal acts and will be disqualified from eligibility. All candidates who take the ACE examinations voluntarily agree to maintain examination confidentiality and are contractually obligated to uphold this agreement. Printed examinations are the copyrighted property of the American Council on Exercise and should any confidentiality agreement be violated, the culpable person or persons will be prosecuted by the American Council on Exercise.

ACE does not discriminate against any individual on the basis of religion, gender, ethnic background, age, national origin or physical disability.

No information submitted to ACE and CASTLE will be released to a third party without authorization and a written consent from the candidate.

CANDIDATE COMMENTS

Upon completion of an ACE exam, candidates are given the chance to submit comments about the examination and testing environment. At paper-and-pencil exam administrations, candidates write feedback on Candidate Comment Forms. These Candidate Comment Forms are sent to CASTLE Worldwide, Inc. along with the completed and blank exams, where they are first reviewed by the Testing Manager at CASTLE and then copied and forwarded to the ACE Certification Manager for review. At the conclusion of an ACE computer-based exam, candidates are asked to complete a brief online survey about the testing environment. These comments are also reviewed by the Testing Manager at CASTLE, and then copied and forwarded to the ACE Certification Manager. Where necessary, the ACE Certification Manager will follow up with CASTLE to determine if further action is warranted.

SECTION IV

ACE CERTIFICATION EXAM DEVELOPMENT

TESTING SERVICE PROVIDER

ACE utilizes the services of CASTLE Worldwide, Inc., (CASTLE) to develop, administer, score and report all ACE certification exams. CASTLE Worldwide offers comprehensive content services built on a history of developing quality high-stakes certification examinations for organizations that license or certify the expertise of professionals in various fields including medical technology, engineering, and fitness. Their specific exam development services include:

- Job/task analysis and role delineation studies
- Development of test specifications
- Content validation studies
- Establishing cut score standards
- Computerized item banking and examination production
- Item writing and test assembly
- Editorial and psychometric reviews
- Development of candidate handouts
- Examination printing
- Delivery of exams in both paper and pencil and computer-based testing formats
- Proctor and exam site identification and training

CASTLE Worldwide, Inc. is located at the following physical address:

CASTLE Worldwide, Inc.
900 Perimeter Park Drive, Suite G
Morrisville, NC. 27560 USA
Phone: 919-572-6880
Web: www.castleworldwide.com
E-mail: info@castleWorldwide.com

CASTLE administers proctored paper-and-pencil certification and licensure examinations to candidates almost anywhere in the world. Exam administration services provided include:

- Establishing domestic and international test sites
- Hiring and training proctors
- Adhering to Americans with Disabilities Act requirements for special-needs candidates
- Customizing answer sheets
- Tracking and inventory control of examination materials
- Ensuring secure storage and shipment of examination materials
- Verifying candidate identification
- Developing test administrator and proctor manuals
- Scoring, equating, and scaling of examinations
- Secure reporting of exam results to candidates
- Secure storage of examination results and candidate information

CASTLE provides individual and aggregated diagnostic score reports. Individual reports provide detailed analysis of candidate performance and identify weak subject areas. Aggregated score analysis evaluates item performance, identifying questions that continue to effectively measure knowledge and skills and those that merit retirement or rewriting. Scoring and reporting services include:

- Equating of different versions of an examination
- Post-examination item analysis and summary statistics review

- Generating and mailing customized score reports
- Hand-scoring upon request
- Preparing diagnostic reports

EXAM DEVELOPMENT PROCEDURES

CASTLE Worldwide, Inc. specializes in offering comprehensive content services including high-stakes certification examination development, upholds these rigorous standards for exam development, administration, scoring and equating. ACE works collaboratively with CASTLE Worldwide, Inc. to uphold these rigorous standards for all ACE certification programs. This ensures that certified professionals meet minimum standards of knowledge and skills necessary to provide safe and effective fitness instruction for the protection of the public.

All ACE exam questions and exam forms are developed by national and representative panels of industry experts called subject matter experts, who are recognized by ACE for their expertise in one or more areas relating to at least one ACE certification program. The composition of exam development committees varies for each certification program due to the different focus and scope of practice for each program. These committees are composed to fulfill the qualification requirements for each certification weighted according to the exam content outlines.

All ACE examinations are developed using the six-point exam development process guided by standards accepted by the American Psychological Association, the American Educational Research Association and the National Council on Measurement in Education. These steps are facilitated by the psychometric team at CASTLE Worldwide, Inc. and include:

1. **Job Analysis/Role Delineation:** A group of industry experts analyzes the specific job requirements in order to develop an outline of the tasks, knowledge and skills required to perform the job effectively (e.g. group fitness instruction, personal training, etc.).
2. **Validation Study:** A research survey is conducted to determine the validity of the job analysis. The survey is sent for validation to a large, random, national sample of fitness professionals who currently hold the certification for which the job analysis was conducted.
3. **Item Writing:** A national and representative panel of industry experts develops exam questions that are tied to exam specifications and referenced to acceptable texts or documents. Once completed, each exam item, or question, must be validated by three Subject Matter Experts who were not involved in writing the question.
4. **Exam Assembly:** The questions are reviewed, selected and approved by an exam committee. The constructed exam is then forwarded to CASTLE Worldwide, Inc. for final editing.
5. **Cut Score Determination:** The passing score is determined as a standard for public protection. Each question is rated by a group of industry experts using criterion-referenced procedures. The experts estimate the percentage of minimally competent professionals that will answer each question correctly. The passing score is then calculated and based on the overall degree of difficulty.
6. **Continual Exam Evaluation:** Following an exam administration, there is a continual evaluation and analysis of each question to help ensure validity. If a question is determined to be flawed, it is reworked or replaced. Exam questions and exam forms will also be retired once they have had significant exposure in terms of exam candidates.

A new exam-development process begins every 5 years, beginning with a new job analysis/role delineation. ACE exams are developed using the six-point exam development process and are guided by standards accepted by the American Psychological Association, the American Educational Research Association, and the National Council on Measurement in Education. All ACE certification programs adhere to the 21 Standards of the National Commission for Certifying Agencies (NCCA).

ACE written simulation exam problems are developed at specialized item writing meetings by a national and representative panel of personal trainers and fitness professionals who have been identified as Subject Matter Experts for the ACE Personal Trainer Certification. Written simulation problems are

developed by a panel, and then edited by a second panel and validated by a third panel to ensure client scenarios that are valid, plausible, realistic, and test actual knowledge and skills that a candidate will have to utilize on a regular basis while working as a personal trainer.

SECURITY

Disclosure of examination content or information to persons outside of the exam development committees is prohibited and constitutes a breach of security, compromising and invalidating the examination and certification in question. All exam development members are required to sign Non-Disclosure agreements prior to participation, agreeing to abide to security procedures established by the psychometric staff to prevent compromise of any examination. All documents created during exam development meetings are shredded upon conclusion of the meeting by the ACE Certification Manager and CASTLE Psychometric Project Manager.

SECTION V

MAINTAINING YOUR ACE CERTIFICATION

ACE certifications are valid for two years, expiring on the last day of the month in which the certification was earned two years prior. In order to maintain current certification, ACE-certified professionals are required to complete 20 hours (2.0 CEC) of continuing education biannually. As stated in the ACE Code of Ethics, ACE-certified professionals agree to remain up-to-date on the latest health and fitness research and understand its practical application. The purpose of this requirement is twofold.

First and foremost, the purpose of continuing education is for the protection of the public. By completing continuing education that advances knowledge, skills, and abilities, ACE-certified professionals stay current with the latest research, professional standards, and guidelines in the fitness industry and allied healthcare. This helps the fitness professional to be better prepared to provide safe and effective fitness instruction. The second purpose is to help the professional advance his or her career.

Given the dynamic nature of the fitness industry and the vast amount of exercise science research published annually, it is imperative for fitness professionals to complete continuing education on a regular basis. With new research and standards being released every couple of years; ACE has set a two-year term for each certification period to help ensure that ACE-certified professionals are completing continuing education at least every other year to remain current. During this two-year period, ACE-certified professionals are required to complete at least 20 hours of ACE-approved continuing education. Both the two-year term for ACE certifications and the average of 10 hours per year of continuing education are in line with other NCCA Accredited certification programs in fitness and allied healthcare.

ACE has set 20 hours (2.0 CEC) of continuing education as a minimum requirement to remain current with exercise science research and to become eligible to renew an ACE-certification. ACE encourages its certified professionals to complete additional continuing education as necessary to help advance their careers and the level of service provided to the public.

CERTIFICATION RENEWAL POLICIES AND PROCEDURES

In order to maintain an ACE certification, you must do the following every two years to renew your certification:

- Complete a total of 20 hours (2.0 CEC; 1 hour = 0.1 CEC) of ACE-approved continuing education credits (CEC)
- Renew your cardiopulmonary resuscitation (CPR) certificate (must be current at time of renewal)
Effective January 1, 2009, all new certification candidates and renewing ACE-certified professionals in the US and Canada will be required to hold current CPR and AED. This requirement is to keep in line with the laws in many states that are requiring AED in all fitness facilities.
- Remain in good standing with the American Council on Exercise
- Submit your renewal online or via mail along with the appropriate renewal payment prior to the expiration date for the certification. Renewal rates are scheduled to recognize individuals who hold multiple credentials, and to provide discounts to those renewing online.

| | Online | Mail-in/Fax |
|-----------------------------|-----------|-------------|
| One Certification | \$79 | \$99 |
| Two Certifications | \$69 each | \$79 each |
| Three Certifications | \$59 each | \$69 each |
| Four Certifications | \$49 each | \$59 each |

ACE-certified fitness professionals are allowed to renew their certification at any point during their certification cycle; however, CEC can only be accrued for the current certification cycle and cannot be applied to future cycles. Renewals can be completed online via your ACE Certified Professional web account, or through faxed or mailed submissions, but must contain all the necessary information to be processed. For mailed or faxed renewals, download a renewal form from the ACE web site at <http://www.acefitness.org/cp/forms.aspx>.

ACE mails renewal informational reminders six and twelve months prior to the expiration date of the professional certification, informing individuals on how they can attain ACE-approved CEC. ACE-certified professionals can access their web account at any time to check the status and expiration dates of their certifications, current CEC on file, CPR information on file, and to renew certifications.

Professionals who hold more than one ACE certification can apply the same CEC to more than one certification for renewal, provided that the subject matter is appropriate for continuing education for all ACE certifications to which the CEC are applied. Each certification has a renewal fee (see table above) and CPR must be current at the time of renewing each certification. *Effective January 1, 2009, all new certification candidates and renewing ACE-certified professionals in the US and Canada will be required to hold current CPR and AED. This requirement is to keep in line with the laws in many states that are requiring AED in all fitness facilities.*

If you have any questions about maintaining your ACE certification, please contact ACE Professional Services at (800) 825-3636 or email conted@acefitness.org.

RENEWING AN EXPIRED CERTIFICATION

ACE extends a professional courtesy of an extension to individuals unable to submit renewal information by their expiration date, but will assess penalties fees to process the application. Individuals submitting renewal applications up to two months late will be assessed a renewal fee of \$129.00 per late certification, while those submitting renewal information two to six months late will be assessed a \$159.00 renewal fee per late certification. Individuals in situations where they must submit their renewals within the six month grace period following their expiration date must submit the renewal via mail or fax, with all appropriate paper work including the renewal fee plus the penalty fee. Individuals who are unable to submit their application within this grace period will lose their certification and have no option, but to reregister to take the exam at the regular fee rate to earn the certification once again.

Exceptions to the extension policy will be considered on a case-by-case basis for documented cases of serious illness, bereavement, natural disasters, and other emergencies. In these instances, candidates must contact ACE Professional Services directly to request reinstatement of their certification. Individuals in this situation must provide documentation to support their request for reinstatement, along with proof of 2.0 CEC, current CPR, and a reinstatement fee of \$189.00 per certification. Reinstatement will only be considered for individuals who are within six to twelve months beyond their expiration date.

If you have questions about renewing an expired certification in situations that meet the parameters above, please contact ACE Professional Services at (800) 825-3636 or email conted@acefitness.org.

CONTINUING EDUCATION CREDITS (CEC)

The ACE Academy reviews and approves over 3,000 continuing education courses from over 400 providers each year. This provides ACE-certified professionals with ample opportunities to earn their CEC for certification renewal. All ACE-approved CEC can be found via the continuing education course search engine on the ACE web site (<http://www.acefitness.org/continuingeducation/default.aspx>), where ACE-approved CEC can be searched by career track specializations, topic, CEC provider, course format (at

home, conference, in class), CEC value, course start date, and location. This is a professional benefit to all ACE-certified professionals, ACE Faculty members providing continuing education, and can be searched by all fitness and allied healthcare professionals. Always look for the ACE Approved logo and a notation of how many CECs each course is worth. If you are unsure if a course is ACE approved, contact ACE Professional Services at (800) 825-3636 for confirmation.

ACE recognizes that professional development and continuing education can come from sources other than traditional ACE-approved continuing education courses. As such, ACE lists “Creative Ways to Earn CEC” on the certified professional portion of the ACE web site. These “Creative Ways” include:

- College course completion with a grade of ‘C’ or higher, with 0.8 CEC awarded per Quarter unit and 1.0 CEC awarded per Semester unit
- Passing an additional ACE certification exam results in 2.0 CEC for the studying involved in preparing for an ACE certification
- Professional presentations can earn up to 0.5 CEC per renewal cycle for the research involved in developing the presentation
- Authorship of a correspondence course can earn up to 0.5 CEC per renewal cycle for the research involved in developing the course
- Serving on an ACE committee results in 0.5 CEC per calendar year
- Obtaining another NCCA-accredited fitness related certification results in 0.5 CEC
- Publishing fitness related articles, book chapters, books, or peer-reviewed journal articles can result in a maximum of 0.5 CEC per renewal cycle
- Clinical observation of surgical procedures that can enhance the understanding of human systems that relate to the certification can be worth a maximum of 0.2 CEC per renewal cycle
- Internships in a fitness or related setting can result in up to 0.2 CEC per renewal cycle (for college credit internships, see college course information above)
- CPR, AED, and First Aid courses are each worth 0.1 to 0.2 CEC awarded according to course length and content
- Community outreach in a fitness related event or similar can result in 0.1 CEC per renewal cycle

For more information on how to maintain your ACE certification, log into your ACE Certified Professional web account and go to: <http://www.acefitness.org/cp/certified-maintain.aspx>.

CONTINUING EDUCATION PETITIONS

ACE recognizes that there are quality educational courses, workshops, and conferences that are not submitted in advance to the ACE Academy for review and awarding of ACE continuing education credits, and has developed the ACE Continuing Education Petition process. In the event that an ACE-certified professional completes educational coursework that has not been reviewed and approved for ACE CEC, he or she may submit a petition for each individual course completed for consideration as continuing education for certification renewal. A \$25.00 petition fee is assessed for each course being petitioned. Each submitted petition must contain a copy of the course materials with course syllabus or outline, learning objectives, the course instructor's resume or curriculum vitae including academic background and/or certifications, and verification of course completion.

Petitions are reviewed by ACE Professional Services according to criteria established by the ACE Academy with input from the ACE Certification Manager. A petitioned course will be awarded continuing education credits only if it meets similar criteria to what is required for courses to be approved in advance by the ACE Academy. This includes the instructor holding either an ACE certification or a four-year college degree in exercise science or a related field to the subject areas taught (e.g., nutrition degree for nutrition related topics), and the course content must be appropriate to advance the knowledge, skills, and abilities the professional holding the specific ACE-certification for which the course is being petitioned. For each hour of educational content, 0.1 CEC will be awarded. No CEC are awarded for activity classes, topics that fall outside of the scope of practice or are deemed inappropriate for the credential, or time dedicated to testing at the completion of a certificate program. Reviews will be completed within 15 days of receipt, after which the individual will be notified as to the final decision from

ACE Professional Services. Courses that are not approved will not be refunded the \$25.00 petition review and processing fee. To submit a petition for a course to be reviewed for continuing education credits, download a petition form from the ACE website at: <http://www.acefitness.org/cp/forms.aspx>.

MAINTAINING YOUR CPR AND AED CERTIFICATES

As a fitness professional, you never know when you may be called upon to step in during a life-threatening event. With this in mind, ACE has joined with the American Heart Association to offer a CPR, AED, and First Aid course to create a safer fitness environment, satisfy OSHA guidelines and learn the personally invaluable skills to save a life. The eight-hour Heartsaver First Aid with CPR and AED Training Course, offered by ACE and endorsed by the American Heart Association, teaches rescuers to effectively recognize and treat adult emergencies in the critical first minutes until emergency medical services personnel arrive, and how to properly and effectively use an automated external defibrillator (AED). For more information on the ACE/AHA Heartsaver class dates and locations, go to the Live Workshops page on the ACE web site at: <http://www.acefitness.org/continuingeducation/liveworkshops.aspx>

ACE PROFESSIONAL SERVICES

The ACE Professional Services Department is the ACE-certified Professional's resource for maintaining his or her ACE certification and advancing your career. Everyone working in ACE Professional Services holds at least one ACE certification and has experience in the field. This professional team can help you with questions you may have about many topics including:

- Certification renewal process
- Use of the ACE Pro Site
- Career benefits
- Status of certification
- CEC status
- Liability insurance
- Secondary certification
- Available CEC courses
- Eligible CEC activities (alternative to attending a class)
- Practical Training

You can contact ACE Professional Services by phone, fax, or email:

Phone: (800)-825-3636

Fax: (858) 279-8064 - to: "Attention: Professional Services"

Email: conted@acefitness.org

CAREER DEVELOPMENT

ACE is committed to help ACE-certified professionals develop their careers through quality continuing education, advanced fitness certifications, and business opportunities. As such, ACE has created many opportunities to the nearly 45,000 ACE-certified professionals in the world. All of these options are accessible via the ACE Certified Professional web site, and include:

ACE Resource Center

Your personal reference desk and library. Get answers on industry trends from highly qualified fitness professionals with access to 90 journals, 1,500 books and several databases of information. The ACE Resource Center is also open to the public.

Discounted Insurance

Exclusive access to discounted liability, studio and health insurance.

SPORTDiscus

This extensive library tool gives you access to more than 400 full text exercise science and sports medicine journals dating back to 1985.

Business Basics

A series of printable step-by-step, easy-to-understand templates, instructional guides and tools developed to increase your business skills.

Professional Discount Program

Professional discounts and special offers on fitness apparel, educational programs, products and more.

ACE Apparel & Business Cards

Sport a professional and polished appearance with the official ACE-certified Professional logo.

GymJOB.com

The health, fitness, recreation and sports industries' premier Web site for a diverse array of employment opportunities. Use it to launch your next career move.

Find an ACE Pro

Located on the consumer side of the ACE web site, this searchable online database puts you in front of thousands of consumers each month, and provides peace of mind to a potential employer or client by allowing them an easy tool for verifying your ACE certification.

ACE Trainer Program

The American Council on Exercise® (ACE®) has teamed with AARP as the provider of personal training services under a new fitness program for AARP members. Focused on prevention, this program provides information, resources and services to help AARP members lead active, healthier lifestyles. AARP has 39 million members who have access to enrolled ACE-certified professionals for personal training services via www.aarpfitness.com.

Focus Groups & Surveys

From ACE decision-makers to the media, we rely on ACE professionals for valuable feedback.

SECTION VI

PRIVACY, SECURITY, AND RECORDS RETENTION

PROTECTION OF PRIVACY

No individual, under employment, contractual agreement, or volunteering to ACE shall dispense candidate or professional information without the expressed, written consent from the individual. Individuals requesting their information be released to third parties must submit a signed letter of consent to permit information release. All individuals, under employment, contractual agreement, or volunteering to ACE are required to sign non-disclosure agreements before commencing service.

Each candidate is assigned a customer identification number for ACE administrative purposes and will select their own username e-mail address and password to access their own account. In the event a candidate forgets a username e-mail address or password, they may contact ACE customer service via email or phone, who will then release the login information upon verification of the individual's identity and correctly answering of identifying questions.

Confidential information will be made available to the appropriate parties if subpoenaed by a court of law or if the candidate or professional violates the ACE *Code of Ethics* whereby the appropriate authorities must be notified.

Certain information is not considered confidential as it is accessible within the public domain. This information includes:

- Certification status
- State of residence
- Position of standing with the American Council on Exercise
- Personal information that the professional willingly permits to be posted on the ACE "Find a Professional" search engine on the ACE web site

The American Council on Exercise posts the ACE Private Policy information on its web site at <http://www.acefitness.org/privacy.aspx>. To protect the privacy of all candidates, consumers, and current and former ACE-certified professionals ACE posts a direct link to this ACE Private Policy at the bottom of every page of the ACE web site (www.acefitness.org), to explain ACE's online information practices and the choices individuals can make about the way their information is collected and used.

ACE requests only the information needed in order to provide the highest level of service to individuals using the ACE web site or contacting ACE via e-mail or phone. The types of personal information collected include:

- Name
- Address
- Phone number
- Company information
- Email address
- Credit/Debit Card Information (for purchases only – credit card information is encrypted)

ACE uses the information provided by individuals about themselves, or someone for whom they are ordering, when placing an order or making a request only to the extent necessary to complete that order or request.

ACE will not sell email addresses or any other personal information. From time to time, ACE sends information about its services to the email or mailing address provided by the individual. On occasion,

ACE leases mailing addresses to organizations that share the ACE mission and meet ACE's criteria and standards of excellence. ACE keeps all email addresses confidential.

All candidates, consumers, and current and former ACE-certified professionals can be removed from receiving any mailings by contacting the ACE Customer Service Department at support@acefitness.org or (800) 825-3636.

Individuals can access or correct the personally identifiable information that ACE maintains on them by contacting ACE Customer Service at support@acefitness.org or by visiting the ACE store and clicking on My Account. To better protect privacy and security, the individual's email address must match the email address used to establish the account. ACE uses this procedure to better safeguard private information. Any individuals who have questions about their account may contact ACE Customer Service by phone at (800) 825-3636.

To further protect web site users, the ACE web site logs IP addresses and browser types for the purposes of system administration and user functionality. These logs kept only for analysis to improve the value of the materials available on the ACE web site. While user sessions are tracked, users remain anonymous. ACE does not link IP addresses to any personally identifiable information. ACE uses only non-identifying and aggregate information to better design its web site.

To prevent unauthorized access, maintain data accuracy, and ensure the correct use of information, ACE has put in place appropriate physical, electronic, and managerial procedures to safeguard and secure the information ACE collects. ACE web site users are responsible for keeping their password secret and are encouraged to never give their password to anyone, even someone claiming to be an ACE employee. The ACE web site may link to other web sites that may collect user information or solicit personal information. ACE does not control these sites, therefore, ACE is not responsible or liable for the privacy practices or content of such sites.

Any candidate, consumer, or current or former ACE-certified professional who has questions about his or her information on file and ACE policies for the protection of their private information should contact the ACE Customer Service Department at support@acefitness.org or (800) 825-3636.

LENGTH OF RECORDS RETENTION

The American Council on Exercise shall indefinitely retain records of all candidates and current and former ACE-certified professionals as long as they remain affiliated with ACE as an organization or until they request (in writing) that the information be removed. While public record of their information will then be removed, ACE will retain the member's records for a period of five years securely. Records of ACE Faculty providers shall be retained for five years. Professionals holding the ACE credential are encouraged to retain certification and continuing education information for a period of four years.

SECURITY

ACE information is maintained in secure databases and archived electronically to a secure local network. Individual information is accessible only via that person's ACE web account protected by the username email address and password selected by the individual. Any hardcopy records are stored in locked filing cabinets in secure areas within the ACE administrative building.