

Exercise Science

Includes:

- Exercise physiology (clinical and applied)
- Exercise science
- Personal fitness training



History

In 2003, the American College of Sports Medicine (ACSM) petitioned the Commission on Accreditation of Allied Health Education Programs for inclusion of two new professions in the CAAHEP system. The petition envisioned one profession at the baccalaureate level, tentatively called "health and fitness specialist," and one at the master's degree level, designated "clinical exercise specialist." Both professions were voted unanimously to be eligible for participation in CAAHEP in April 2003. In April 2004, a Committee on Accreditation for the Exercise Sciences was voted admission into the CAAHEP system as a collaborating Committee on Accreditation with the American College of Sports Medicine as their sponsoring organization. Two sets of *Standards and Guidelines* were formally approved by the CAAHEP Board of Directors in 2004, with the "health and fitness specialist" now designated as the "exercise science professional" and the "clinical exercise specialist" as the "exercise physiologist." For exercise physiology, the *Standards* laid out two tracks: applied and clinical.

Exercise Physiology



Career Description

Exercise physiology is a discipline that includes clinical exercise physiology and applied exercise physiology. Applied exercise physiologists manage programs to assess, design, and implement individual and group exercise and fitness programs for apparently healthy individuals and individuals with controlled disease. Clinical exercise physiologists work under the direction of a physician to apply physical activity and behavioral interventions in clinical situations where they have been scientifically proven to provide therapeutic or functional benefit.



Employment Characteristics

As a clinical part of the health and wellness team, exercise physiologists can work with personal fitness trainers, exercise science professionals, and physicians in cardiac rehabilitation, typically in a hospital or clinical setting. Exercise physiologists work with clients who have been diagnosed with a chronic metabolic, pulmonary, or cardiac disease.



Educational Programs

Length: Exercise physiologist programs can be completed in a 2-year master's degree level program.
Prerequisites: Applicants should have a high school diploma or equivalent, meet the specific institutional entrance requirements, and have a bachelor's degree in exercise science.

Curriculum: Exercise physiologist programs will include a comprehensive academic curriculum and at least one culminating internship experience.

Exercise Science



Career Description

Exercise science encompasses a wide variety of disciplines including, but not limited to, biomechanics, sports nutrition, sport psychology, motor control/development, and exercise physiology. The study of these disciplines is integrated into the academic preparation of exercise science professionals. Exercise science professionals work in the health and fitness industry and are skilled in evaluating health behaviors and risk factors, conducting fitness assessments, writing appropriate exercise prescriptions, and motivating individuals to modify negative health habits and maintain positive lifestyle behaviors for health promotion.



Employment Characteristics

As an integral part of the health and wellness team, exercise science professionals can work with personal fitness trainers and exercise physiologists in a number of different settings, such as corporate, clinical, community, and commercial fitness and wellness centers. Exercise science professionals work with the apparently healthy population and clients with controlled disease, leading and demonstrating these clients in safe and effective methods of exercise. The exercise science professional can also assess risk factors and identify the health status of clients.



Educational Programs

Length: Exercise science programs can be completed in a 4-year bachelor's degree level program.
Prerequisites: Applicants should have a high school diploma or equivalent and meet the specific institutional entrance requirements.
Curriculum: Exercise science programs include a comprehensive academic curriculum and at least one culminating internship experience.

Personal Fitness Training



Career Description

Personal fitness trainers are skilled practitioners who work with a wide variety of client demographics in one-to-one and small group environments. They are familiar with multiple forms of exercise used to improve and maintain health-related components of physical fitness and performance. They are knowledgeable in basic assessment and development of exercise recommendations. In addition, they are proficient in leading and demonstrating safe and effective methods of exercise and motivating individuals to begin and to continue with healthy behaviors. They consult with and refer to other appropriate allied health professionals when client conditions exceed the personal trainer's education, training, and experience.



Employment Characteristics

As an integral part of the health and wellness team, personal fitness trainers can work with exercise

science professionals and exercise physiologists in a number of different settings, such as corporate, clinical, community, and commercial fitness and wellness centers. Personal fitness training involves working with the apparently healthy population, leading and demonstrating these clients in safe and effective methods of exercise.



Educational Programs

Length: Personal fitness training programs can be completed in a 1-year certificate program or in a 2-year associate's degree level program.

Prerequisites: Applicants should have a high school diploma or equivalent and meet the specific institutional entrance requirements.

Curriculum: Personal fitness training programs will include a comprehensive academic curriculum and at least one culminating internship experience.



Inquiries

Careers

American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD)
1900 Association Drive
Reston, VA 20191-1598
800 213-7193
www.aahperd.org

American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR)
401 North Michigan Avenue, Suite 2200
Chicago, IL 60611
312 321-5146
www.aacvpr.org

Medical Fitness Association (MFA)
PO Box 73103
Richmond, VA 23235-8026
804 897-5701
www.medicalfitness.org

American Kinesiotherapy Association (AKTA)
CCB-KT
PO Box 1390
Hines, IL 60141-1390
800 296-2582
www.akta.org

Certification

American College of Sports Medicine (ACSM)
401 West Michigan Street
Indianapolis, IN 46202
317 637-9200
www.acsm.org

National Strength and Conditioning Association (NSCA)
1885 Bob Johnson Drive
Colorado Springs, CO 80906
800 815-6826
www.nasca.com

National Academy of Sports Medicine (NASM)
26632 Agoura Road
Calabasas, CA 91302
800 460-6276
www.nasm.org

The Cooper Institute
12330 Preston Road
Dallas, TX 75230
972 341-3200
www.cooperinst.org

Program Accreditation

Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with:
Committee on Accreditation of the Exercise Sciences (CoAES)
401 West Michigan Street
Indianapolis, IN 46202
317 352-3826
www.coaes.org