# FACS: Exercise Physiologist (HS)

# Summary

The purpose of this lesson is to help students understand the Exercise Physiologist career. Students will learn their target heart rate zone and complete an activity that could be done with an exercise physiologist.

#### Time Frame

1 class periods of 45 minutes each

## **Group Size**

**Pairs** 

#### Materials

Exercise Physiologist PowerPoint Heart worksheet Jump ropes Stop watches (Optional - teachers can just time for the entire class) Computers with internet access (to implement activities in Step 4) Additional fitness handouts have been attached

## **Background for Teachers**

Review all information and materials prior to class discussion. Exercise Physiologists identify physiological mechanisms underlying physical activity, the comprehensive delivery of treatment services concerned with the analysis, improvement, and maintenance of health and fitness, rehabilitation of heart disease and other chronic diseases and/or disabilities, and the professional guidance and counsel of athletes and others interested in athletics, sports training, and human adaptability to acute and chronic exercise. They are not the same as Physical Therapists, Athletic Trainers, Fitness Trainers, and Aerobic Instructors. An exercise physiologist is not the same as a personal trainer. People need exercise. It is medicine when prescribed by a Board Certified Exercise Physiologist. Board certified means that they have taken and passed the Exercise Physiologist Certified exam (EPC). Personal trainers may or may not have a college degree and, if they do, the degree may or may not be in a related field. They are not qualified to earn the EPC degree. They can neither be held accountable to the exercise physiology Code of Ethics nor practice exercise physiology. The education required to be an Exercise Physiologist is a bachelor's degree (4 year degree) in exercise physiology, and take the EPC exam. Exercise Physiologists are certified by ASEP (American Society of Exercise Physiologists) to practice exercise physiology. Exercise Physiologists work in health promotion, fitness development, colleges and universities, clinical rehabilitation, and sport and athletic programs. They are hired as: o Sports and wellness program instructors and directors o Strength coaches for college, university and professional sports programs o Teachers at institutions of higher learning (must have a Phd) o Researchers in companies that make physiological equipment for testing and evaluation o Managers and exercise leaders in corporate wellness programs o Instructors in health and fitness clubs o Supervisors of specialized health, fitness, wellness, or lifestyle programs in correctional services, police, fire, and emergency response organizations o Fitness instructors in YMCAs, spa and resort centers o Exercise specialists in cardiopulmonary rehabilitation programs o Fitness directors and managers in the military o Exercise technologists in cardiology suites o Fitness instructors and supervisors at the state, regional, and national levels in sports and athletic programs o Sports consultants in areas of psychology and training, biomechanics, efficiency and metabolism, and nutrition o Electrophysiology technologists in hospital settings The salary ranges from approximately \$23,520 to \$56,000 based on employer, education, and experience The job outlook is good due to the increasing emphasis on prevention of

illness and on exercise as a means of promoting good health. Also, there are many opportunities for research on aging, rehabilitation of muscle injuries, and the health benefits of exercise. Career information found from: o American Society of Exercise Physiologists http://www.asep.org/general o United States Department of Labor Exercise Physiologists http://www.bls.gov/soc/2010/soc291128.htm o Health Professions Network http://www.healthpronet.org/ahp\_month/08\_04.html

#### **Instructional Procedures**

Step 1: Review the background material for teachers. Step 2: Go through the PowerPoint with your students. The video on slide 8 is also included as an attachment. It works best in the PowerPoint if you play it through once on the computer before presenting it. Step 3: At the end of the PowerPoint you will prepare your students to go through the activity listed on the attached worksheet. Students will be finding their target heart rate training zone first. After this is found, the students will need one jump rope per partnership. Each partner will take their turn jump roping for 60 seconds and recording their heart rate. They will calculate and see if they were able to stay in their target heart rate training zone. They will record their findings and ways they think they could stay in their target heart rate training zone. Step 4: If there is time left, or if the teacher would like to take an extra day, there are some online activities that students can try. These would be good activities and health plans to implement in your entire school. • NFL Play 60 - fun activity to implement in your school o http://www.nflrush.com/play60 • Be the Beat - heart healthy activities for students to register for individually o http://bethebeat.heart.org/

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