EASTERN ARIZONA COLLEGE

Personal Training

Course Design

2015-2016

Course Information

Division: Health & Physical Education
Course Number: HPE 107
Title: Personal Training
Credits: 3
Developed by: Ralph Miller/Revised by Jim Bagnall
Lecture/Lab Ratio: 2 Lecture/0 Lab
Transfer Status: Pending Evaluation

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<th>Division</th>
<th>ASU</th>
<th>NAU</th>
<th>UA</th>
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<td>Pending Evaluation</td>
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Activity Course: No
CIP Code: 13.1314
Assessment Mode: Pre/Post Test (20 Questions/20 Points)
Semester Taught: Upon Request
GE Category: None
 Separate Lab: No
Awareness Course: No
Intensive Writing Course: No

Prerequisites
Concurrent enrollment in HPE 104 or HPE 105 or HPE 204 or HPE 205

Educational Value
This course is designed for the life-long learner who aspires to improve their understanding of the practical application of physical conditioning techniques. Students will apply the principles on themselves and other students, and may have the opportunity to work one-on-one with individuals enrolled in HPE 104 or 105. Students who complete the course will have the option to sit for the NCSF Personal Trainer Certification Test, which leads to a personal trainer certificate.

Description
This course is designed to develop an understanding of the principles of strength and fitness training, including fitness evaluation, exercise prescription, special populations, nutrition and the scientific foundations of continued learning required in an ever-changing field. It will also provide a hands-on application of these principles. Identical to HHP 107.

Supplies
Proper exercise attire
Competencies and Performance Standards

1. Demonstrate an understanding of Functional Anatomy and Biomechanics in relation to exercise

Learning Objectives

What you will learn as you master the competency:

a. Various exercises utilizing various structures of bones and joints.
b. Exercises utilizing the muscles in each muscle group and identifies the major actions and joints involved in specific muscle groups.
c. Various concentric, eccentric and isometric muscle actions.
d. Various exercises utilizing line of gravity, base of support, balance and stability.
e. The principles of proper biomechanics.
f. The principles of safety in a hands on setting.
g. To identify mechanical errors and demonstrates an understanding of how to correct them.

Performance Standards

Competence will be demonstrated:

- by instructor evaluation of learner demonstrated skills
- pass a written exam and evaluation

Your performance will be successful when:

- learner performs various exercises utilizing various structures of bones and joints
- learner performs exercises utilizing the muscles in each muscle group and identifies the major actions and joints involved in specific muscle groups
- learner performs various concentric, eccentric and isometric muscle actions
- learner performs various exercises utilizing line of gravity, base of support, balance and stability
- learner utilizes the principles of proper biomechanics
- learner utilize the principles of safety in a hands on setting
- learner identifies mechanical errors and demonstrates an understanding of how to correct them

2. Understand and implement a health appraisal, screening and evaluation

Learning Objectives

What you will learn as you master the competency:

a. The understanding of blood pressure.
b. To utilize informed consent.
c. To utilize a health status questionnaire.
d. To utilize a health behavior form.

Performance Standards

Competence will be demonstrated:

- pass a written exam and evaluation

Your performance will be successful when:

- learner performs various health appraisals, screenings and evaluations on self and others in a hands on setting
learner monitors resting heart rate and blood pressure of self during exercise
learner fills out and reviews an informed consent form, health status questionnaire and health behavior form

3. Identify and explain the elements of exercise physiology

Learning Objectives
What you will learn as you master the competency:

a. An understanding aerobic and anaerobic exercise and evaluate type of energy production based on activity being performed.
b. To describe speed, power, endurance, and metabolism.
c. To describe the effects of exercise tests, training, heredity, sex, age, altitude, carbon monoxide and cardiovascular and pulmonary diseases on VO2 max.
d. To summarize the effects of endurance training on muscle, metabolic and cardiovascular responses to sub maximal work and VO2 max.
e. To contrast cardiovascular responses measured during dynamic exercise with those measured during isometric exercise or heavy resistance training.

Performance Standards
Competence will be demonstrated:

Your performance will be successful when:

o learner performs both aerobic and anaerobic exercises
o learner utilizes various exercise for the improvement of speed, power, endurance and metabolism
o learner performs various elements for the improvement of VO2 max within the limitations of external factors influencing VO2 max
o learner experiences and measures the cardiovascular response of various types of exercise

4. Identify aspects of functional fitness

Learning Objectives
What you will learn as you master the competency:

a. To identify and define warm-ups, flexibility, resistance training, muscular strength and endurance, and cardiovascular fitness.
b. To identify considerations for special populations in regard to these 5 aspects of fitness.

Performance Standards
Competence will be demonstrated:

Your performance will be successful when:

o learner implements the five principles of functional fitness in a personal fitness program
o learner demonstrates mastery of the 5 principles through the ability demonstrate, and implement each principle in a fitness program
o learner takes into consideration the limitations for children, older adults, obese
populations, diabetics, asthmatics and women when providing fitness recommendations

5. **Understand elements of nutrition and body composition**

*Learning Objectives*

*What you will learn as you master the competency:*

a. Learn the six essential nutrients, describing their role in the proper function of the body and learning recommended percentages of calories from each.

b. Learn the importance of vitamins and minerals and how to optimize them in a typical diet.

c. To describe assessment of dietary intake.

d. Learn the USDA Food Guide Pyramid.

e. To compare and contrasting the various methods for body composition assessment.

*Performance Standards*

*Competence will be demonstrated:*

- pass a written exam and evaluation

*Your performance will be successful when:*

- learner implements a basic nutrition plan based on the six essential nutrients and Food Guide Pyramid
- learner reviews the nutrition plan of other students
- learner performs two types of body composition assessment

*Types of Instruction*

Lecture, demonstration, and participation

*Grading Information*

*Grading Scale*

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