EXERCISE PHYSIOLOGY
Course Syllabus

Course Number: FITS-0116
OCAS Code: None
Course Length: 45 Hours
Career Cluster: Health Science
Career Pathway: Therapeutic Service
Career Major(s): Fitness Specialist

Pre-requisite(s):
Upon completion of this course the student will be prepared to bill, code, and process different types of insurance in the chiropractic healthcare system.

Course Description:
Upon completion of this course the student will be prepared to bill, code, and process different types of insurance in the chiropractic healthcare system.

Textbooks:

Course Objectives:
A. Define vocabulary associated with exercise physiology and optimum fitness.
B. Describe the cardiovascular system and explain cardiovascular fitness.
C. Explain the difference between aerobic and anaerobic exercise; give examples and describe benefits of each.
D. Describe and demonstrate the principals and procedures of strength training, flexibility, cardiovascular conditioning tests, and flexibility tests.
E. Identify and describe muscle fiber types and neuromuscular anatomy.
F. Describe adaptation to strength training and the general concepts of developing a strength training program.
G. Apply the principles of biomechanics and kinesiology.
H. Identify and define the four types of motion, forces of motion and physical laws affecting motion.
I. Understand the principles of center of gravity, line of gravity, and base of support.
J. Learn human motion terminology.
K. Review muscles and movements of the pelvis, torso, upper and lower extremities.
L. Describe the Food Pyramid and basic nutrients.
M. Identify the different nutrient and caloric needs for different age groups.
N. Lean the importance of fluid and hydration.
O. Discuss eating disorders and how they affect the health of the client.
P. Explore fad diets; what causes the weight loss? Are they harmful? and do they work?
Q. Identify health conditions and risk factors that may necessitate referral or place clients at risk.
R. Identify possible contraindicated activities.
S. Assess health screening forms.
T. Identify required vs. relative evaluation components.
U. Perform cardio-respiratory testing and evaluation.
V. Conduct body composition testing and evaluation.
W. Conduct flexibility testing and evaluation.
X. Conduct strength and endurance testing and evaluation.
Y. Conduct follow-up consultation and testing.

1 ODCTE Objective
All unmarked objectives are TTC instructor developed.

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures:
1. Students are graded on theory and lab practice and performance.
2. Each course must be passed with seventy (70%) percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.
4. Career Major grades established during coursework are a major criteria in successfully obtaining certification.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

Available Certifications/College Credit: The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

College Credit Eligibility: The student must maintain a grade point average of 2.0 or better.