COURSE SYLLABUS

LAST REVIEW	Spring 2021
COURSE TITLE	Exercise Physiology
COURSE NUMBER	EXSC-0212
DIVISION	Math, Science, Business & Technology
DEPARTMENT	Exercise Science
CIP CODE	24.0101
CREDIT HOURS	3
CONTACT HOURS/WEEK	Class: 3
PREREQUISITES	BIOL0141, Human Anatomy and Laboratory, BIOL0271/0272 Physiology and Physiology Laboratory
COURSE PLACEMENT	Students must meet the correct placement measure for this course. Information may be found at: https://www.kckcc.edu/admissions/information/mandatory-evaluation-placement.html

COURSE DESCRIPTION

This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical fitness. The emphasis is on physiological responses and adaptation to exercise. Basic elements of exercise physiology, kinesiology, and motor learning are addressed.

KANSAS SYSTEMWIDE TRANSFER: course number

The learning outcomes and competencies detailed in this course outline or syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups project for this course as approved by the Kansas Board of Regents.

PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit: https://kansasregents.org/workforce_development/program-alignment

Program Learning Outcomes

1. Student will be able to analyze and implement an appropriate assessment of client to determine their exercise needs.

2. Student will be able to discuss the importance of exercise science as it relates to enhancing and recognizing health and fitness activities, sports, and athletic performance.

3. Student will be able to recognize incorrect lifting technique and develop a plan for error correction.

TEXTBOOKS
http://kckccbookstore.com/

METHODS OF INSTRUCTION
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE
 I. Introduction - Why Study Exercise Physiology?
 II. The Energy Systems
 III. The Cardiovascular System
 IV. The Neuromuscular System
 V. The Pulmonary System
 VI. Nutrition
 VII. Training the Body Systems
 VIII. Body Composition and Weight Control
 IX. Ergogenic Aids X. The Environment

COURSE LEARNING OUTCOMES
Upon successful completion of this course, the student will:
A. Be able to explain why exercise physiology is important for the student in an allied health field.

B. Be able to describe how energy is transferred at rest and during physical activity.

C. Be able to list the components of the cardiovascular system and how they are affected by exercise.

D. Be able to examine the pulmonary system at rest and during physical activity.

E. Be able to list the major nutrients and explain the specific needs of the exercising body.

F.   Be able to demonstrate training techniques for the muscular and cardiovascular systems.

G.   Be able to compare lean and fat body mass, and how to control the level of each in the body.

H.   Be able to discuss illegal uses of ergogenic aids amongst athletes.

I.   Be able to explain how the body tolerates ranges in temperature.

ASSESSMENT OF COURSE LEARNING OUTCOMES
Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES
Student Handbook
https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

College Catalog
https://www.kckcc.edu/academics/catalog/index.html

College Policies and Statements
https://www.kckcc.edu/about/policies-statements/index.html

Accessibility and Accommodations
https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.