

Sul Ross State University
KES 3305 – Physiology of Exercise
Summer I
2016

Instructor: CJ Richardson, MEd., MA, CSCS, USAW-1
Email: Clarence.Richardson@sulross.edu
Phone: 432-837-8448 (office); 708-846-1259 (cell)
Location: Graves-Pierce – 106
Meeting Time: Tuesday/Thursday 11:00-12:15
Office Location: Graves-Pierce – 102C
Office Hours: TBA

Course Description:

This course will focus on the structures and systems of the human body, and how they are affected by both acute and chronic exercise.

Teaching Approach:

This will be a lecture-based course which will also include class discussion, homework assignments, exams, and a group presentation.

Course Text:

NO REQUIRED TEXT. MATERIAL WILL BE PRESENTED FROM THE FOLLOWING SOURCES:

Wilmore, J.H., Costill, D.L., & Kenney, W.L. (2008). *Physiology of Sport and Exercise (4th ed)*. Champaign, IL: Human Kinetics.

Baechle, T.R. & Earle, R.W. (2008). *Essentials of Strength Training & Conditioning (3rd ed)*. Champaign, IL: Human Kinetics.

Thompson, J.L., Manore, M.M., & Vaughan, L.A. (2008). *The Science of Nutrition*. San Francisco, CA: Pearson Education.

Student Learning Outcomes: Bachelor of Science in Kinesiology and Human Performance

1. The Kinesiology and Sport Science students will understand the principles of motor learning; understand the practice for developing motor skills; apply knowledge to biomechanical principles; apply knowledge of individual and teams sports and understand the principles of dance, personal performance activities, recreational activities and outdoor pursuits (Movement Skills and Knowledge Domain).
2. The Kinesiology and Sport Science students will understand major body systems, principles of physical fitness and benefits of a healthy lifestyle; understand the principles and activities for developing cardiovascular endurance; understand principles and activities for developing and maintaining flexibility, muscular strength and endurance; and understand health and wellness concepts (Health-Related Physical Fitness Domain).
3. The Kinesiology and Sport Science students will know how to use effective instruction and assessment to prepare physically educated individuals; understand factors relevant to learning and performance in physical education and use knowledge to promote students' development; understand the structure and purposes of physical education programs; and understand legal issues and responsibilities of physical education teachers (The Physical Education Program Domain).

Standard Alignment:

Standard II: The physical education teacher understands principles and benefits of a healthy, physically active lifestyle and motivates students to participate in activities that promote this lifestyle.

<i>Competency 006:</i>	The teacher understands major body systems, principles of physical fitness development and training and the benefits of a healthy, active lifestyle.
<i>Competency 007:</i>	The teacher understands principles and activities for developing and maintaining cardiovascular endurance.
<i>Competency 008:</i>	The teacher understands principles and activities for developing and maintaining flexibility, posture and muscular strength and endurance.
<i>Competency 009:</i>	The teacher understands health and wellness concepts, including those related to nutrition, weight control and stress management, and analyses ways in which personal behaviors influence health and wellness.

Classroom Policies:

Students are to arrive to class on time. Cell phones must not be visible or heard during class, or student could be asked to leave the room. Such a disturbance and dismissal from class will count as an unexcused absence.

Academic Dishonesty:

The basic definition of “Academic Dishonesty” is presenting work as your own that you are not entirely responsible for. This includes, but is not limited to, plagiarism, cheating on exams or assignments, and collusion. Academic Dishonesty will result in an F in the course.

Program Accessibility:

Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student’s responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Mary Schwartz, M. Ed., L.P.C., in Counseling and Accessibility Services, Ferguson Hall, Room 112. The mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Telephone: 432-837-8691. E-mail: mschwartz@sulross.edu

Grade Breakdown:

Attendance/Participation	250
Exams	300
Group Presentation	150
Assignments/Presentations	300
Total	1000

Attendance/Participation:

Every day you will have the opportunity to earn 10 Attendance/Participation points. You will receive 5 points for showing up on time and staying for the whole class, and you can earn another 5 points by participating. This point structure will allow you to miss 2 classes before your grade starts to be affected by absences.

Regular absences and/or tardiness may be grounds for being dropped from the course. Excused absences must be documented.

Exams:

You will have 3 exams, each scored out of 150 points. I will drop your lowest exam score at the end of the semester.

Group Presentation:

You will work in a group of 3-4 people and make a presentation to the class. This presentation will be worth 150 points.

Assignments:

You will have four assignments throughout the semester, worth 75 points each. Late assignments will lose 15 points for each class day that the assignment is not turned in.

Tentative Weekly Schedule:**WEEK 1**

Tuesday, August 23rd – Class Intro; Review Syllabus; Student Info

Thursday, August 25th – Introduction to Physiology; Anatomy of a Muscle

WEEK 2

Tuesday, August 30th – Metabolism

Thursday, September 1st – Hormonal Control

WEEK 3

Tuesday, September 6th – **Assignment #1 Due**

Thursday, September 8th – Neural Control of Muscles

WEEK 4

Tuesday, September 13th – Energy Expenditure and Fatigue

Thursday, September 15th – EXAM #1 Review

WEEK 5

Tuesday, September 20th – **EXAM #1**

Thursday, September 22nd – Post-Exam Review; Cardiovascular System

WEEK 6

Tuesday, September 27th – Respiratory System; Cardiorespiratory Response to Exercise

Thursday, September 29th – Principles of Exercise Training; Adaptations to Exercise

WEEK 7

Tuesday, October 4th – **Exercise Programming Assignment**

Thursday, October 6th – Thermoregulation; Exercise at Altitude

WEEK 8

Tuesday, October 11th – EXAM #2 Review

Thursday, October 13th – **EXAM #2**

WEEK 9

Tuesday, October 18th – Post-Exam Review

Thursday, October 20th – Optimizing Performance

WEEK 10

Tuesday, October 25th – Body Composition and Nutrition Ergogenic Aids and Sport

Thursday, October 27th – Children & Adolescents; Aging; Sex Differences Prescription of Exercise for Health and Fitness; Cardiovascular Disease; Obesity, Diabetes, and Physical Activity; Other Illnesses and Conditions

WEEK 11

Tuesday, November 1st – Movie (Part 1)

Thursday, November 3rd – Movie (Part 2); **Assignment #2 Due**

WEEK 12

Tuesday, November 8th – Group Presentation Work Day

Thursday, November 10th – **Group Presentations**

WEEK 13

Tuesday, November 15th – **Group Presentations**

Thursday, November 17th – **Group Presentations**

WEEK 14

Tuesday, November 22nd – **Blackboard Assignment Due by 12:30 PM**

Thursday, November 24th – *THANKSGIVING BREAK*

WEEK 15

Tuesday, November 29th – Final Exam Review

FINAL EXAM

Monday, December 5th – 10:15 AM