

**Sul Ross State University**  
**PE 3305 – Physiology of Exercise**  
**Fall 2015**

**Instructor:** CJ Richardson, MEd., MA, CSCS, USAW-1  
**Email:** [Clarence.Richardson@sulross.edu](mailto:Clarence.Richardson@sulross.edu)  
**Phone:** 432-837-8448 (office); 708-846-1259 (cell)  
**Location:** Graves-Pearce Room 106  
**Meeting Time:** Tuesday/Thursday 11:00-12:15  
**Office Location:** Graves-Pearce – 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* (4<sup>th</sup> ed). Champaign, IL: Human Kinetics.

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

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

**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.

*Competency 006:* The teacher understands major body systems, principles of physical fitness development and training and the benefits of a healthy, active lifestyle.

**Student Learning Outcomes:**

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).

**Student Objectives: At the end of the course the students will be able to ....**

- A. Demonstrate knowledge of principles, skills, exercises and physiological processes involved in aerobic conditioning.
- B. Evaluate and select appropriate cardiovascular endurance activities for various developmental levels and purposes.
- C. Demonstrate knowledge of techniques for monitoring intensity, duration and endurance levels during aerobic activities (e.g., perceived exertion, heart rate monitor).
- D. Apply knowledge of techniques for student self-assessment of cardio- respiratory health and fitness (e.g., frequent monitoring of pulse rate to reach and maintain target heart rate for an appropriate amount of time).
- E. Analyze potential health risks involved in cardiovascular endurance training (e.g., effects of environmental conditions on circulatory and respiratory systems) and knows risk reduction techniques.
- F. Apply knowledge of anatomy, kinesiology and physiological principles to design, adapt and modify activities that promote cardiovascular endurance.

**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:**

Qualified students with disabilities needing academic or other accommodations to ensure full participation in the programs, services and activities at Sul Ross State University should contact Disability Services Coordinator, Ferg 112, Box C-122, Alpine, TX, 79832 (432-837-8203).

**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 – Class Introduction; Review Syllabus; Student Information Sheet

Thursday – Introduction to Physiology; Anatomy of a Muscle

**WEEK 2**

Tuesday – Metabolism and Hormonal Control

Thursday – Neural Control of Muscles

**WEEK 3**

Tuesday – Energy Expenditure and Fatigue

Thursday – Cardiovascular System

**ASSIGNMENT #1 DUE**

**WEEK 4**

Tuesday – Respiratory System

Thursday – Cardiorespiratory Responses to Exercise

**WEEK 5**

Tuesday – EXAM #1 Review

Thursday – **EXAM #1**

**WEEK 6**

Tuesday – Principles of Exercise Training

Thursday - Adaptations to Different Types of Training

**ASSIGNMENT #2 DUE**

**WEEK 7**

Tuesday – Thermoregulation; Exercise at Altitude

Thursday, October 8<sup>th</sup> – **Group Presentations**

**WEEK 8**

Tuesday – **Group Presentations**

Thursday – **Group Presentations**

**WEEK 9**

Tuesday – **Group Presentations**

Thursday – Training for Sport

**WEEK 10**

Tuesday – Body Composition and Nutrition

Thursday – Ergogenic Aids and Sport

**ASSIGNMENT #3 DUE**

**WEEK 11**

Tuesday – EXAM #2 Review

Thursday – **EXAM #2**

**WEEK 12**

Tuesday – Children & Adolescents; Aging; Sex Differences

Thursday - Prescription of Exercise for Health and Fitness

**WEEK 13**

Tuesday – Cardiovascular Disease and Physical Activity

Thursday – In-Class Practical Activity (**Basis of ASSIGNMENT #4**)

**WEEK 14**

Tuesday – Obesity, Diabetes, and Physical Activity; Other Illnesses and Conditions Associated with Lack of Physical Activity

Thursday – FINAL EXAM Review

**ASSIGNMENT #4 DUE**

**FINAL EXAM**

**Tuesday – 10:15 AM**