



SUL ROSS
KINESIOLOGY DEPARTMENT

KINE 3305-001
Physiology of Exercise
Spring 2023

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Office Hours: Monday/Wednesday: 1:00 – 3:00 pm, Tuesday/Thursday: 1:30 pm – 3:00 pm,
Friday: 9:00 am-noon **or by appointment (email to set an appointment)**
Meeting: T/Th: 11:00 am – 12:15 am GPC 108; online via Blackboard and Connect
Required Text: Inclusive Access: Exercise Physiology: Theory and Application to Fitness and Performance
11th edition.
Author: Powers
Publisher: McGraw-Hill Education

This class requires **Connect** textbook access –

You do not need to purchase the book or Connect; this class is a part of Inclusive Access. Inclusive Access is a course material affordability program, designed by institutions and guided by the Department of Education to deliver digital learning resources to students, at a significantly reduced cost, on or before the first day of class. All students should have been sent a password the day before the first day of class via email. See blackboard for the link or go to McGraw Hill Assignments & Tests tab in blackboard and click on the first assignment.

COURSE DESCRIPTION

Physiological responses of the human body during various levels/intensities of physical activity and exercise.

PURPOSE OF THE COURSE

The purpose of this course is to provide an in-depth study of the principles of exercise physiology.

Marketable Skills – The following marketable skills are met in this course:

- **Collaboration** – students will interact with one another through a multitude of class discussions and activities

- **Critical Thinking** – Exercise sound reasoning to analyze issues, make decisions, and overcome problems. The individual is able to obtain, interpret, and use knowledge, facts, and data in this process, and may demonstrate originality and inventiveness.
- **Career Readiness** – students will develop the skills necessary to thrive in a management roll in their chosen profession

STUDENT LEARNING OUTCOMES

The learning activities, assignments, and exams in this course are constructed to assess each student's mastery of the following learning outcomes:

- a) The acute physiological changes that occur during exercise
- b) Appropriate means of maintaining the body in optimum physiological status for exercise
- c) The physiological adaptations that occur following exercise training
- d) Health benefits of a consistent exercise program and the health risks associated with inactivity
- e) The students will be able to discuss how the various systems of the human body interrelate in response to exercise.
- f) The students will be able to discuss the various control steps and mechanisms of metabolism (ATP production and ATP utilization).

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.

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

The teacher understands principles and activities for developing and maintaining cardiovascular endurance.

The teacher understands principles and activities for developing and maintaining flexibility, posture, muscular strength, and endurance.

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.

Program Learning Outcomes

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 team's 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).

- 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).

GRADING POLICIES

Outcome Measure	Points Per Item	Number Of Items	Available Points	Percentage of Grade	Grading Scale
Connect Smartbook Chapter Readings	8	25	200	20%	900 or more A
Chapter Objectives/Study Questions	5	20	100	10%	800-899 B
Connect Tests (*Final Exam is Test 5)	60/70	5	310	31%	700-799 C
Labs	24-30	8-10	240	24%	600-699 D
Attendance	2-4	29	100	10%	Less than 599 F
SRSU Event	25-50	1-2	50	5%	
			1000	100%	

*Letter Grading as per SRSU policy will be used in this course.

**Be sure to complete all assignments by the due date.
Depending on the assignment, late assignments may
not be accepted or may be accepted but will have
points deducted!**

COURSE REQUIREMENTS

I. SmartBook via Connect Chapter Readings (8 points each, 200 points total).

25 Chapters/3 Sections; Smartbook Chapter Readings are done before covered in class (this is a “flipped classroom”). Connect Readings must be done by the due date. **LATE WORK WILL NOT BE ACCEPTED.** All due dates for chapter readings are found in Course Calendar (**every Monday @ 11:59 pm**). Highly encourage you to work ahead of the due dates.

Smartbook Chapter Readings are an adaptive learning and reading tool. SmartBook highlights key topics for students to focus on, and provides links to additional material such as videos and slideshows, to help deepen students understanding of the learning objectives. SmartBook prompts students with questions based on the material they are studying. By assessing individual answers, SmartBook learns what each student knows and identifies which topics they need to practice. This adaptive technology gives each student a personalized learning experience and path to success.

II. Chapter Objectives/Study Questions.

25 Chapter Objectives; 20 Class days will cover either 1 or 2 Chapter Objectives. Students will be given the answers to Chapter Objectives in the class lecture. If students come to class, students will get the answers. Chapter Objectives can be turned in to the professor by the next class day or scanned and turned into blackboard. If absent for any given reason, students will need to complete Study Questions found in Blackboard in order to receive the 5 points. The class outline is 2 weeks of covering chapter objectives/lectures and then 1 week for labs; repeat. Highly encourage students to keep a copy of chapter objective worksheets/study questions to use for Chapter Tests.

III. TESTS (60 points each for Test 1-4; 70 points for Test 5 Final Exam; 310 points total).

Five tests will be given; Test 5 is a comprehensive Final Exam (100 points). Tests will use Proctorio, a remote proctoring software that monitors test takers. Students must make sure to properly set up Proctorio before taking a test, failure will result in the test not being able to load properly. For more information:

<https://mhedu.force.com/CXG/s/article/Proctorio-Quick-Tips-for-Students-General?dc=>

Students will receive a window to take the test on their own outside of class. You only get one attempt for each Test. Tests include multiple-choice questions and possibly True and False questions. Once you start a test, you will have unlimited time to complete the questions. The questions are automatically scored after you take the Test. Will be given a window to take the test, and for each day late, a 5% deduction. PowerPoints for each chapter are posted in Blackboard which can be helpful while taking tests. Smartbook Chapter Readings and class discussions/lectures/class objectives will also be helpful; however, it is recommended that students take notes to better prepare themselves.

IV. Labs.

8-10 Labs throughout the semester. All labs will be started during class with a partner, however, if the lab is not completed during class, students will need to schedule a time with the professor or TA to finish outside of class. In addition, all of the lab assignments will be worked on during class, however, if absent for any reason, students must schedule lab makeup with TA or professor in order to get points. If absent, students must perform lab under the supervision of a TA or professor in order to receive points. Students will perform pre-lab (5-10 points) before starting the lab.

Labs will use AD Instruments LT sensors and Power Lab for recording biosignals into Lt software. Lt sensors/Powerlab are used with a modified version of Lt Exercise Physiology Collection that contains lessons, each with a combination of tutorials, pre-lab prep, and a lab. The combination of lessons and Lt Sensors/Powerlab engages students in hands-on learning. Students record their own biological signals directly into Lt, making scientific theory relevant and real.

V. Attendance (100 points total, ½ points deducted for coming to class late).

Get points for coming to class each day; ½ points deduction for coming late. If tardy, must talk to the professor after class in order to get ½ points. Don't assume the professor will automatically change your grade after the class. If come to class late and don't talk to the professor after class, points may not be awarded for being late and will stay a 0. If a class is missed without a verified, documented reason, the student will not receive the participation points for that class, and attending class does not in and of itself guarantee that a student will earn the points. In-class assignments and labs, which are missed due to class absence may not be made up unless the student has a verified reason in writing (medical, family funerals, a car breaks down on the way to class, military service, excused athletic travel & competition listed in their competitive schedule for SRSU student-athletes, etc., with written documentation) for missing class, and contacts the instructor via email, on the day missed or prior to making arrangements to complete the lab or to turn in missed work prior to the next class.

ALL COURSE REQUIREMENTS DEADLINE

Due to the time requirement for grading purposes, all course requirements must be submitted/completed by the 'Course Requirements Deadline' of **Monday in Week 16 at 11:59 pm** to be counted for credit towards the final letter grade in this course. There will be no exceptions to this policy. Late deductions will apply as per the above policy.

LATE WORK POLICY

All coursework must be submitted by the provided due dates in Blackboard or Connect. LearnSmart readings must be completed by the due date for credit – **NO LATE WORK WILL BE ACCEPTED**. All other work: labs, chapter objectives, study questions, tests, and homework carry a 30% deduction for 1-7 days late. For consideration to turn in work passed 1 week late, must be approved by the professor for grading consideration. If approved by the professor, assignments turned in over 1 week late will carry a minimum 50% deduction.

LEARNER SUPPORT BLACKBOARD

Our 24/7 Blackboard online support desk and toll-free hotline is made available to SRSU faculty and students to begin using immediately for any Blackboard technical support issues. SRSU 24/7 Blackboard Technical Support Online Support Desk Contact Info: Toll Free: 888.837.6055 Email: blackboardsupport@sulross.edu

MCGRAW HILL CONNECT

If you have any technical issues or questions, please contact McGraw-Hill's Customer Experience Group at 1-800-331-5094.

How to use Connect - [Student Registration for Blackboard with Inclusive Access Deep Integration \(mhhe.com\)](http://mhhe.com)

TENTATIVE COURSE CALENDAR

Week	Content	Due
1 1/18 to 1/20	Syllabus Review, Class Expectations, Demonstrations, Blackboard	LearnSmart Ch. 00,1,2 – 1/23
2 1/23 to 1/27	Chapter 00 – Introduction to Exercise Physiology Chapter 1 – Common Measurements in Exercise Physiology Chapter 2 – Control of the Internal Environment	LearnSmart Ch. 3,4 – 1/30
3 1/30 to 2/3	Chapter 3 – Bioenergetics Chapter 4 – Exercise Metabolism	
4 2/6 to 2/10	Lab – Ad Instruments	LearnSmart Ch. 5,6 – 2/13
5 2/13 to 2/17	Chapter 5 – Cell Signaling and Hormonal Response to Exercise Chapter 6 – Exercise and the Immune System	<u>Test #1 (Unit 1)</u> – 2/19 LearnSmart Ch. 7,8 – 2/20
6 2/20 to 2/24	Chapter 7 – The Nervous System: Structure/Control of Movement Chapter 8 – Skeletal Muscle Structure and Function	
7 2/27 to 3/3	Lab – Ad Instruments	LearnSmart Ch. 9, 10 – 3/6
8 3/6 to 3/10	Chapter 9 – Circulatory Response to Exercise Chapter 10 – Respiration during Exercise	LearnSmart Ch. 11, 12 – 3/20
3/13 to 3/17	SPRING BREAK	NO CLASS!

<p>9 3/20 to 3/24</p>	<p>Chapter 11 – Acid-Base Balance During Exercise Chapter 12 – Temperature Regulation</p>	<p><u>Test #2 (Unit 2) -3/26</u></p>
<p>10 3/27 to 3/31</p>	<p>Lab – Ad Instruments</p>	<p>LearnSmart Ch. 13, 14, 15 – 4/3</p>
<p>11 4/3 to 4/7</p>	<p>Chapter 13 – The Physiology of Training: Effect on VO₂ Max Chapter 14 – Physiology of Resistance Training Chapter 15 – Preventing Chronic Disease: PA & Healthy Eating</p>	<p>LearnSmart Ch. 16, 17,18 – 4/10 Good Friday Holiday April 7</p>
<p>12 4/10 to 4/14</p>	<p>Chapter 16 – Exercise Prescription for Health and Fitness Chapter 17 – Exercise for Special Populations Chapter 18 – Nutrition and Body Composition for Health</p>	<p><u>Test #3 (Unit 3) – 4/16</u></p>
<p>13 4/17 to 4/21</p>	<p>Lab – Ad Instruments</p>	<p>LearnSmart Ch. 19,20,21 – 4/24</p>
<p>14 4/24 to 4/28</p>	<p>Chapter 19 – Factors affecting performance Chapter 20 – Training for Performance Chapter 21 – Training for Female/Children/Special Populations</p>	<p>LearnSmart Ch. 22,23,24 – 5/1</p>
<p>15 5/1 to 5/5</p>	<p>Chapter 22 – Nutrition Body Composition and Performance Chapter 23 – Exercise & Environment Chapter 24 – Ergogenic Aids</p>	<p><u>Test #4 (Unit 4) – 5/7</u> Last Day of Class – 5/4</p>
<p>16 5/8 to 5/12</p>	<p>Final Exam</p>	<p><u>Final Exam – 5/9</u></p>

UNIVERSITY POLICIES

Distance Education Statement

Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login information to verify students' identities and to protect students' information. The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website.

Accidents & Injuries

In the case of bodily or personal property damage, the Kinesiology Department will not be held responsible. The student must report any field experience related to injury or illness to the instructor immediately. Any expense incurred due to injury or illness will be the student's responsibility.

Academic Integrity Statement

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden.

Academic Civility Statement

Students are expected to interact with professors and peers in a respectful manner that enhances the learning environment. Professors may require a student who deviates from this expectation to leave the face-to-face (or virtual) classroom learning environment for that particular class session (and potentially subsequent class sessions) for a specific amount of time. In addition, the professor might consider the university disciplinary process (for Academic Affairs/Student Life) for egregious or continued disruptive behavior.

Academic Affairs Service Statement

Sul Ross faculty, staff, and students are expected to model responsible citizenship through service activities that promote personal and academic growth while enhancing the university, local, regional, national, and global communities. These activities will foster a culture of academic/public engagement that contributes to the achievement of the university's mission and core values.

Libraries Info

The Bryan Wildenthal Memorial Library in Alpine offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

Academic Excellence Statement

Sul Ross holds high expectations for students to assume responsibility for their own individual learning. Students are also expected to achieve academic excellence by:

- Honoring the core values of Sul Ross.
- Upholding high standards of habit and behavior.
- Maintaining excellence through class attendance and punctuality.
- Preparing for active participation in all learning experiences.
- Putting forth their best individual effort.
- Continually improving as independent learners.
- Engaging in extracurricular opportunities that encourage personal and academic growth.
- Reflecting critically upon feedback and applying these lessons to meet future challenges.

ADA Statement

SRSU Disability Services. Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Rebecca Greathouse Wren, LPC-S, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email rebecca.wren@sulross.edu. Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, SUI Ross State University, Alpine. Texas, 79832.

Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another based on race, religion, ethnicity, age, gender, national origin, or sexual preference. Still, we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Diversity Statement

I aim to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, socioeconomic class, age, nationality, etc.). I also understand that the crisis of COVID, economic disparity, and health concerns, or even unexpected life events could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create an inclusive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.