

Physiology of Human Performance

KINE 5313; Spring 2024 Online, 8 weeks, 1/17 - 3/8

SYLLABUS

Faculty Information

Dr. Julianna M. Dean, PhD, MS, CSCS

- Email is the best way to get in contact with me: <u>julianna.dean@sulros</u>s.edu
 - o Please make sure you put KINE 5313 somewhere in the subject line of the email.
 - o Please address me as "Dr. Dean", NOT Ms. Dean
 - Please use your SRSU email address. I cannot answer emails from non-SRSU accounts.
 - Please be professional in your communications, especially when communicating by email. Please address me as Dr. Dean. For a review on how to write a professional email, please see https://www.grammarly.com/blog/professional-email-in-english/.
- Office Phone: 432-837-8556
- Office Hours:
 - Tuesday: 10-11am, 2-4pm
 - o **Wednesday:** 10am-12pm, 2-4pm
 - o **Thursday:** 10-11am, 2-4pm
 - o or by appointment

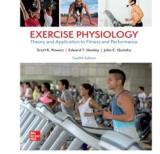
Required Textbook

Inclusive Access: Exercise Physiology: Theory and Application to

Fitness and Performance

Edition: 12 (has treadmills on the front)

Author: Scott Powers



This class requires Connect textbook access. You do not need to purchase the book or Connect. This class is part of Inclusive Access, a course material affordability program. Inclusive Access is 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. Please let me know if you did not receive this or need access. julianna.dean@sulross.edu.

Course Description

The purpose of this course is to provide an in-depth study of the human body's physiological response to exercise and physical activity.

Student Learning Outcomes

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

- A. Understand the basics of energy metabolism and nutrition.
- B. Recognize aerobic and anaerobic principles of work and exercise.
- C. Examine body composition measurements themes in exercise science.
- D. Describe cardiorespiratory, renal, muscular, and neural responses to exercise.
- E. Identify the impact differing environments have on thermoregulation during exercise.
- F. Explain physiological responses to exercise.
- G. Apply exercise physiology concepts with real subjects.
- H. Collect real-world data of aerobic and anaerobic tests.
- I. Analyze exercise physiology measurements from real data.

Marketable Skills

The following marketable skills are met in this course:

Content Knowledge

Students in the program will demonstrate content knowledge in exercise physiology, nutrition, sports law, tests and measurements, research methods, motor learning, group dynamics, and health and human behavior necessary for successful performance in their field.

Critical Thinking

Students will be asked to critically decipher real-world scenarios and exercise sound reasoning to analyze issues, make decisions, and overcome problems. The individual can 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 role in their chosen profession. They articulate thoughts and ideas clearly and effectively in written and oral forms to persons inside and outside of the organization. The individual has public speaking skills, can express ideas to others, and can write/edit memos, letters, and complex technical reports clearly and effectively.

Grading Policies

Outcome Measure	Description	Points	% of Total Grade
Course Contract	Initial and sign the course contract and upload to Blackboard	Completion only (0 points)	
SmartBook Assignments	Using McGraw Hill Connect, complete SmartBook assignment for each chapter	20 selected chapters x 10 points each = 200 total points	20
Tests	4 tests through Connect; all are proctored using PROCTORIO	4 tests x 50 points each = 200 total points	20
Discussions 4 Discussions (30 points for post, 10 points for each of two replies)		4 discussions x 50 points each = 200 points	20

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Assignments	4 Assignments	4 assignments x 100 points each = 400 points	40
(Extra Credit)	SmartBook Chapters (Ch 16, 17, 21)	10 points per completion = 30 points possible extra credit	-
	Total Points	1000	100

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

A: 900+ points; B: 800-899; C: 700-799; D: 600-699; F: <599

Note: Satisfactory progress in the Sports Administration program means a cumulative GPA of 3.0 in all core classes (e.g., everything leading up to the final practicum course). In most cases, this means a 'B' or better in each class is considered satisfactory progress.

Course Contract

To start the class, all students must read, initial, sign and date the course contract. The contract clearly explains my expectations of you as a student in this class, and it covers my course policies. Please upload this within the first week of class as listed on the course schedule. You cannot continue in the class if you do not upload this.

SmartBook Assignments

SmartBook is an interactive reading program provided through McGraw Hill Connect. These assignments ask you questions to assess your comprehension of each chapter. These SmartBook readings will cover information that will be on each of the tests. *Please make sure to read the chapter BEFORE completing the SmartBook assignments!*

Tests

There are four tests throughout the semester that will assess your knowledge of the corresponding SmartBook assignments. Each test contains a mix of information from the chapters assigned. They consist of multiple-choice and true/false questions. All tests will be proctored through McGraw Hill's proctoring service, PROCTORIO. This service requires access to a webcam. Your webcam MUST be pointed at your face/workspace during your exam or you will not receive credit for your exam.

Discussions

There are four discussions. Each is worth 50 points total: 30 points for your post and 10 points for each of your two replies to classmates' posts. The prompts are under "Discussions" on Blackboard and will populate according to the class schedule. **The use of AI to complete any work in this class, including discussions, is prohibited.**

In each discussion, there are threads (i.e., where you create a post or "response"), and your replies (i.e., where you reply to a classmate). Remember, a "discussion" involves multiple opinions and voices, so please make sure to not only post but to reply to your classmates, too! This is how you gain all 50 points for each discussion.

Each reply to a classmate should be a minimum of 100 words. This means you need to say more than "good job!" or "I like what you said!" Your reply should be a substantial comment. It may attempt to apply the author's content in a new way. This could be done through finding other information and citing your source, describing an application to the field of kinesiology, or even providing constructive criticism. PLEASE, make sure to always be professional in your language. This is NOT a place for

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informal/chat room language. To respond to a post, click the blue link "Reply" at the bottom left of a post.

Assignments

There are four assignments that focus on specific topics covered in the text. Each assignment provides a practical, real-world application of the course content. Each assignment also has questions at the end. Please respond to the prompts in paragraph structure and cite sources when appropriate using APA or AMA format.

STUDENT RESPONSIBILITIES

Communication

You must use your Sul Ross student email address. I cannot answer emails from non-Sul Ross accounts. Please check your Sul Ross email on a regular basis for class notifications or instructions. The student is responsible for information conveyed through all instructor emails and course announcements. Students are also responsible for checking Blackboard on a regular basis for course information. Please inform the instructor if you are having difficulty with email or Blackboard. Students may also seek assistance through the Office of Information Technology (OIT): https://www.sulross.edu/oit/

Student Activity

Attendance in an online class is achieved by logging on (Blackboard tracks your logins), downloading class information (PowerPoints, handouts, assignments, etc.), studying the information, doing the assignments, SmartBook chapters, and tests.

Assignments/Deadlines

Please note that this is **not** a self-paced course. There are due dates for assignments, discussions, SmartBook readings, and tests throughout the semester. These due dates are listed on Blackboard and the course schedule. Assignments must be completed and submitted by the due date and time. Late or missed assignments will not be accepted. All assignments and quizzes/tests will be turned in on Blackboard. Do not wait until the last moment to complete work as Blackboard may cause challenges in getting work submitted on time.

Quiz/Test Policies

Please read the quiz tips on Blackboard prior to taking any quiz or test. You must use a compatible browser (do NOT USE A PHONE OR MOBILE DEVICE). You cannot have other computer windows open (such as the internet) while taking the quiz or Blackboard will discontinue the assessment. Please note that quizzes and tests are independent work and should not be completed with the help of other individuals. Blackboard reports the IP address of each login; therefore, the instructor will know if you and a classmate were logged on in the same location taking the assessment.

Please note that all tests will be proctored through PROCTORIO from McGraw Hill. Please watch the video on Blackboard on how to get the PROCTORIO extension set up in your Chrome browser.

Tests are timed, and you will only see one question at a time. Once you open the question, you must answer it. You cannot skip it and try to answer it later. Questions will be administered in a random order for each student. Missed quizzes and tests will receive a grade of zero. Please plan well and give yourself plenty of time to complete each assessment.

MY COURSE POLICIES

Communication is key.

I expect you to attend class (by logging in to Blackboard), engage, and complete your work by the deadlines assigned. However, I understand that extenuating circumstances can occur. Therefore, I expect you to inform me as soon as possible if you are having complications completing your work in a timely manner. **With communication, we can work out a plan for your success**. If you do not meet my expectations, and you do not communicate with me, there is nothing I can do to help you succeed. It is YOUR RESPONSIBILITY to communicate with me.

I do not accept late work.

If you do not turn in an assignment on time, you will receive a zero for that assignment. I understand extenuating circumstances can occur. **Therefore, any extensions must be requested at least 24 hours in advance of the due date.**

I have zero tolerance for cheating, academic dishonesty, and plagiarism.

For any student who cheats, is suspected of cheating, or who unintentionally or intentionally plagiarizes, I immediately contact the Dean of Student Affairs, and the student receives a zero for the work. *There are no exceptions*. Please use anti-plagiarism software before turning in any assignment to avoid any consequences. If you need a review on how to avoid plagiarism and cite sources correctly, please visit the Lobo Den: https://www.sulross.edu/student-advising/lobo-den/ **The use of AI to complete work in this class is prohibited.**

This is not a self-paced course. Deadlines are hard deadlines.

Please be vigilant of the course schedule and deadlines. You are responsible for your participation and work. If you expect to miss any deadline, you must contact me at least 24 hours in advance to work out a plan for your success. If you contact me after a deadline, there is nothing I can do; you will receive a 0.

I do not calculate grades before the end of the semester.

All point totals are listed in this syllabus which will aid you in calculating your own grade. All of your grades will be on Blackboard.

Do not email me with questions until you check Blackboard announcements, your email, and you re-read this syllabus. Many questions can be answered by checking Blackboard announcements, your email, and reviewing this syllabus. If you still have questions after reviewing these three things, please email me using your Sul Ross email. I cannot answer email from non-Sul Ross accounts. Please address me as Dr. Dean in your communications. Please see the next course policy on how to write a professional email.

I value good grammar and professional communication.

In all of your work, please use good grammar. I require complete sentences in all of your assignments. If you write in phrases or without correct punctuation, you will receive point deductions. If you need a review on good grammar and acceptable writing practices, please make an appointment with the writing center.

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Please be professional in your communications, especially when communicating by email. Please address me as Dr. Dean. For a review on how to write a professional email, please see https://www.grammarly.com/blog/professional-email-in-english/.

Please be respectful both to your peers and professors in all communications both during and outside of class. In this class we may discuss topics that are debatable in nature. I ask that you share your experiences and opinions as you are willing; all opinions are welcomed and encouraged. Therefore, as we embrace differing opinions, students should be prepared to experience and participate in respectful conflict. If at any time a student engages in a disrespectful manner to peers or the professor, the student will be asked to leave the class and not return.

I value mental health.

I believe mental health is just as important as physical health. Free and confidential counseling services are available to all Sul Ross students. This course may feature discussions that can be reflective in nature. If at any time you feel the need to speak with somebody, you can make an appointment: https://www.sulross.edu/counseling-and-accessibility-services/

24-Hour National Suicide Prevention Hotline: 988

Sul Ross has partnered with TimelyCare, an online mental health support platform and all SR students will have access to nine free Counseling sessions by visiting https://timelycare.com/SRSU/. SRSU also continues to offer counseling in Ferguson Hall room 112 in Alpine, and telehealth Zoom session for our Rio Grande, Uvalde, Eagle Pass, and remote students.

Note: Students, you are also eligible to receive **nine** free sessions with Timely Care. After the nine free sessions, additional sessions cost is \$79 per session.



UNIVERSITY POLICIES

ADA Statement

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the 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

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request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director at 432-837-8203 or email mschwartze@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

SRSU Distance Education Statement

Students enrolled in distance education courses have equal access to the university's academic support services, such as 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 a secure login. 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. Directions for filing a student complaint are located in the student handbook.

Libraries

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 LobolD and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).

No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.

New for Fall 2023: Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL) and ScanIt to get materials delivered to you at home or via email.

Academic Integrity

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as 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. Students should also avoid using open AI sources *unless permission is expressly given* for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

Classroom Climate of Respect

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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 on the basis of 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.

Supportive Statement

I am to create a learning environment for my students that supports various perspectives and experiences. I understand that the recent pandemic, economic disparity, and health concerns, or even unexpected life events may 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 a supportive 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.

Important Civic Dates

- Feb. 5—Last day to register to vote in the primary
- Feb. 20—First day of early voting
- March 5—Primary Elections
- May 4—Local elections in Texas

https://www.votetexas.gov/

Finally, *PLEASE* complete the course evaluation at the end of class. This helps me keep my job here!

Course Schedule: Spring 2024				
Week	Dates (Mon–Sun)	Topic	Activities/ Assignments All Due Dates @ 11:59PM CST (unless otherwise noted) (Activities may be submitted early)	
Week 1	*Wednesday, 1/17 – 1/21 *first day of class is Wednesday	Physiology of Exercise	We Cover: Ch 0: Introduction to Exercise Physiology Ch 1: Common Measurements in Exercise Physiology Ch 2: Control of the Internal Environment Ch 3: Bioenergetics Assigned: Course Contract SmartBook Ch 00-3 Discussion 1 Due Saturday, 1/20: Discussion 1 Post Due Sunday, 1/21: Course Contract SmartBook Ch 00-3 Discussion 1 Post Due Sunday, 1/21: SmartBook Ch 00-3 Discussion 1 Replies (at least 2)	
Week 2	1/22 – 1/28	Physiology of Exercise	We Cover: Ch 4: Exercise Metabolism Ch 5: Cell Signaling and the Hormonal Response to Exercise Ch 6: Exercise and the Immune System Assigned: SmartBook Ch 4-6 Test 1 (Ch 0-6) Assignment 1 Due Sunday, 1/28 SmartBook Ch 4-6 Test 1 (Ch 0-6) Assignment 1 Ch 0-6) Assignment 1	
Week 3	1/29 – 2/4	Physiology of Exercise	We Cover: Ch 7: The Nervous System: Structure and control of movement Ch 8: Skeletal Muscle: Structure and function Ch 9: Circulatory Responses to Exercise Assigned: SmartBook Ch 7-9 Assignment 2 Discussion 2 Due Thursday, 2/1: Discussion 2 Post Due Sunday, 2/4: SmartBook Ch 8–10 Assignment 2 Discussion 2 Replies (at least 2)	
Week 4	2/5 – 2/11	Physiology of Exercise	We Cover:	

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			 Test 2 (Ch 7-12) Due Sunday, 2/11: SmartBook Ch 10-12 Test 2 (Ch 7-12)
Week 5	2/12 – 2/18	Physiology of Exercise (Ch 13-14); Physiology of Health and Fitness (Ch 15)	 We Cover: Ch 13: The Physiology of Training: Effects of aerobic and anaerobic training Ch 14: The Physiology of Resistance Training Ch 15: Exercise is Medicine – Part 1: Prevention of Chronic Diseases Assigned: SmartBook Ch 13-15 Assignment 3 Discussion 3 Due Thursday, 2/15: Discussion 3 Post Due Sunday, 2/18: SmartBook Ch 13-15 Assignment 3 Discussion 3 Replies (at least 2)
Week 6	2/19 – 2/25	Physiology of Health and Fitness (Ch 18), Physiology of Performance (Ch 19, 20)	We Cover: Ch 18: Nutrition, Body Composition, and Weight Management Ch 19: Factors Affecting Performance Ch 20: Training for Performance Assigned: SmartBook Ch 18-20 Test 3 (Ch 13-15, 18-20) Due Sunday, 2/25:: SmartBook Ch 18-20 Test 3 (Ch 13-15, 18-20)
Week 7	2/26 – 3/3	Physiology of Performance	We Cover: Ch 22: Nutrition, Body Composition, and Performance Ch 23: Exercise and the Environment Ch 24: Ergogenic Aids Assigned: SmartBook Ch 22-24 Assignment 4 Discussion 4 Due Thursday, 2/29 Discussion 4 Post Due Sunday, 3/3 SmartBook Ch 22-24 Assignment 4 Discussion 4 Replies (at least 2)
Week 8	3/4 – 3/8 (Wednesday)		 Comprehensive Final Exam released Wednesday, March 8 on Blackboard Due by 3/8 by 11:59pm (Covers Ch 0-15, 18-20, 22-24)

Extra Credit SmartBook Chapters: (10 points extra toward final point total for each completion)

- Ch 16: Exercise is Medicine-Part 2: Therapy for chronic diseases and prevention of age-related physiological dysfunction
- Ch 17: Exercise is Medicine-Part 3: Exercise prescriptions for health and fitness
- Ch 21: Training for the Female Athlete, Children, Special Populations, and the Masters Athlete