

KIN 4390-010

THEORY OF STRENGTH AND CONDITIONING

FALL SEMESTER 2021



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Office Hours: M-F 9-11 am

Course Information

Course Description

This course is based on the National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialist (CSCS) standards. Exam questions will come from lectures, texts, selected readings, discussions, and handouts. This course will prepare you to sit for the NSCA CSCS certification exam.

Course Credits

3 credit hours

Prerequisite and Co-requisite Courses

KIN 3370 and 3372

Prerequisite Skills

Accessing Internet websites, using ASU Library resources, and proficiency with Microsoft Word and/or PowerPoint are expectations of the KIN 4390.

Program Outcomes

Upon completion of the program of study for the KIN 4390, the graduate will be prepared to:

1. Develop an understanding of anatomy and physiology as it is related to the biomechanics, metabolism, and prescription of strength training and conditioning.
2. Demonstrate knowledge of the principles of training as they are related to exercise

- prescription for cardiorespiratory fitness, strength, speed, and power.
3. Display knowledge of exercise techniques and how to apply them towards program development for strength and conditioning.
 4. Understand techniques for measurement and evaluation, and organization and administration of a successful strength and conditioning program

Student Learning Outcomes

Student Learning Outcome By completing all course requirements, students will be able to:	Assignment(s) or activity(ies) validating outcome achievement:	Mapping to Program Outcomes
Develop an understanding of anatomy and physiology as it is related to the biomechanics, metabolism, and prescription of strength training and conditioning.	Exams	
Demonstrate knowledge of the principles of training as they are related to exercise prescription for cardiorespiratory fitness, strength, speed, and power.	Exams; Group Presentation	
Display knowledge of exercise techniques and how to apply them towards program development for strength and conditioning.	Exams, Practical Experiences	
Understand techniques for measurement and evaluation, and organization and administration of a successful strength and conditioning program	Exams; Practical Experiences, Group Presentation	

Course Delivery

This is a face-to-face course with learning resources and supplemental materials posted in Blackboard.

Required Texts and Materials

Haff, G., Triplett, N. (2015). *Essentials of Strength Training and Conditioning*. (4th Edition). Champaign, IL: Human Kinetics. ISBN 978-1492501626

Technology Requirements

To successfully complete this course, students need to have access to a computer of their own or ASU's computer lab.

Communication

Faculty will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

Virtual communication: Office hours and/or advising may be done with the assistance of the telephone, Collaborate, Skype, etc.

Grading

Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Percent/Points of Total Grade
Exams (4 x 100 pts)	70
Practical Experiences	15
Group Project	15
Total	100%

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

A = 90.00-100 points

B = 80.00-89.99 points

C = 70.00-79.99 points

D = 60.00-69.99 points

F = 0-59.99 points (Grades are not rounded up)

Teaching Strategies

Students are expected to be “active learners.” It is a basic assumption of the instructor that students will be involved (**beyond the materials and lectures presented in the course**) discovering, processing, and applying the course information using peer-review journal articles, researching additional information and examples on the Internet, and discussing course material and clinical experiences with their peers.

Assignment and Activity Descriptions

Strength and Conditioning Group Assignment

In groups of 3-4 students, develop an **off-season** strength and conditioning program for an athlete of your choosing and is **not a sport anybody in the group is actively involved in** (including sport, age, gender, resistance training experience, etc.). This program should be **four weeks long** and should include resistance training, speed/agility training, and plyometric training if applicable to the sport. Your group will turn in an **Excel spreadsheet** outlining what will be done for each day of the week for the four week training cycle. Finally, your group will **present your strength and conditioning program** to the class with an accompanying Powerpoint slideshow that discusses the sport and how it is played, the type of athlete the program is designed for, the biomechanical analysis of the sport, a discussion of how your program addresses the needs of the athlete, and a week by week overview of the strength and conditioning program.

Late Work or Missed Assignments Policy

- A. All assignments are due at the beginning of the class on the due date. For students not turning in an assignment a grade of zero (0) will be recorded.
- B. Prior arrangements must be made with the instructor if an absence from an exam or presentation is unavoidable. In the event that an exam is missed, an alternate form of the test will be given to the student. The student has **one week** from the original test date to contact the instructor to arrange a make-up test. If no contact is made by the student within one week, the grade will be recorded as a zero (0).
- C. The student is responsible for all work and is encouraged to have a contact within the class. Students are encouraged to set up an appointment to meet with the instructor for additional information as needed.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)¹
- [Angelo State University Catalog](#)²

Student Responsibility and Attendance

Students are expected to attend all scheduled class meetings. Chronic failure to attend class *will* affect your final grade in this class.

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Health and Human Services adheres to the university's [Statement of Academic Integrity](#).³

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#).⁴ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047

dallas.swafford@angelo.edu

Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)⁵ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)⁶ in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).⁷

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)⁸ for more information.

Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

Syllabus Changes

The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student's responsibility to look for such communications about the course on a daily basis.

Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manner:

Online: www.angelo.edu/incident-form

Face to face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: michelle.boone@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: www.angelo.edu/title-ix.

Course Syllabus Statement on Required Use of Masks/Facial Coverings by Students in Class At Angelo State University

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory [Facial Covering Policy](#) to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Course Schedule

Week 1: Course Introduction / Syllabus Overview

Ch. 1 Structure and Function of Body Systems

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Week 2: Ch. 2 Biomechanics of Resistance Exercise

Ch. 3 Bioenergetics of Exercise and Training

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Week 3: Ch. 4 Endocrine Responses to Resistance Exercise

Catch up and Review for Exam I

Exam I – Ch. 1-4

Week 4: Ch. 5 Adaptations to Anaerobic Training Programs

Ch. 6 Adaptations to Aerobic Training Programs

Ch. 7 Age and Sex Related Differences

Week 5: Ch. 9 Basic Nutritional Factors in Health

Ch. 10 Nutrition Strategies for Maximizing Performance

Ch. 11 Performance Enhancing Substances

Week 6: Catch up and Review for Exam II

Exam II Ch. 5, 6, 7, 9,10, 11

Ch. 14 Warm-up and Flexibility Training

Week 7: Ch. 15 Exercise Techniques for Free Weight and Machine Training

Ch. 16 Exercise Techniques for Alternative Modes and Nontraditional Implement Training

Ch. 17 Program Design / **Group Presentation Assigned**

Week 8: Ch. 17 Program Design

Practical Experience –Resistance Training/Spotting Practical Experience **Junnel**

Ch. 18 Plyometric Training

Week 9: Ch. 19 Speed and Agility Training

Practical Experiences in Olympic Lifting - **Junnel Center**

Practical Experience Chains and Bands– **Junnel Center**

Week 10: Catch up and Review for Exam III
Exam III Ch. 14-19
Practical Experience Speed, Agility, and Plyometrics - **Junnel Center**

Week 11: Ch. 20 Aerobic Endurance Exercise Training
Ch. 21 Periodization and Ch. 20 Rehabilitation
Practical Experience Workout - **Junnel Center**

Week 12: Meet in your group for work on presentations all week

Week 13: Thanksgiving Break

Week 14: **Presentations**
Presentations
Final Review

Week 15: 12/8 **Final Exam IV- 10:30-12:30**

Student Evaluation of Faculty and Course

Students in all programs are given the opportunity to evaluate their courses and the faculty who teach them. Evaluations are most helpful when they are honest, fair, constructive, and pertinent to the class, clinical experience, or course. Faculty value student evaluations, and use student suggestions in making modifications in courses, labs and clinical experiences.

Angelo State University uses the IDEA (Individual Development and Educational Assessment) system administered through Kansas State University for all course evaluations. The Office of Institutional Research and Assessment administers IDEA for the entire university, online and has established a policy whereby students can complete course evaluations free from coercion.

Select the SLO's you use

1. Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)
2. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course

3. Acquiring skills in working with others as a member of a team
4. Learning how to find, evaluate, and use resources to explore a topic in depth

End of Syllabus

¹ <https://www.angelo.edu/student-handbook/>

² <https://www.angelo.edu/catalogs/>

³ <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

⁴ <https://www.angelo.edu/services/disability-services/>

⁵ <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

⁶ <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

⁷ https://www.angelo.edu/dept/writing_center/academic_honesty.php

⁸ <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>