SJSU SAN JOSÉ STATE UNIVERSITY

College of Health and Human Sciences · Kinesiology

Advanced Fitness Assessment and Exercise Prescription

KIN 162

Fall 2025 Sections 01, 02 In Person 3 Unit(s) 08/20/2025 to 12/08/2025 Modified 08/16/2025

Contact Information

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Office Hours:

Mondays and Wednesdays 4-4:45pm (YUH 244); or by appointment via Zoom

Course Information

Day	Time	Classroom
Tuesdays and Thursdays	Section 01 (Lecture): 12:30-1:20pm Section 02 (Activity): 1:30-2:20pm	YUH 233

IMPORTANT: If you do not attend the first day of class, do not inform the instructor before your absence on the first day of class, or do not inform the instructor of your intention to continue in the class within 48 hours of the first class meeting, you will be dropped from the class. Additionally, failing to meet the prerequisites of the class will lead to being dropped from the class.

Course Description and Requisites

In-depth study and analysis of the principles and techniques used in the assessment of physical fitness and health as well as the design of conditioning programs and physical activities.

Prerequisite: KIN 070 (or equivalent) for majors/minors only and KIN 155, or instructor consent. Grade of "C-" or better in KIN 070 and KIN 155.

Misc/Lab: Lecture 2 hours/Activity 2 hours.

Letter Graded

Program Information

Mission - In an atmosphere of social justice, equity, and respect for diversity, the mission of the Department of Kinesiology is to create and disseminate knowledge; engage in community service; prepare and graduate exemplary kinesiology professionals; as well as meet individual and societal needs for physical activity, sport, movement, and wellness.

PLOs - Upon completion of a Bachelor of Science degree program in the Department of Kinesiology students will be able to:

- Explain, identify, and/or demonstrate the theoretical and/or scientific principles that can be used to address issues or problems in the sub-disciplines in kinesiology.
- Effectively communicate in writing (clear, concise and coherent) on topics in kinesiology.
- Effectively communicate through an oral presentation (clear, concise and coherent) on topics in kinesiology.
- Utilize their experiences across a variety of health related and skill-based activities to inform their scholarship and practice in the sub disciplines in kinesiology.
- Identify and analyze social justice and equity issues related to kinesiology for diverse populations.

Course Goals

Course Objectives

Upon successful completion of this course, students will be able to do the following.

1. Identify and explain the basic principles involved in the development and maintenance of cardiorespiratory fitness, muscular strength and endurance, flexibility, body composition, anaerobic power and capacity, speed, agility, and balance (PLO #1).
2. Design and apply individualized programs to improve cardiorespiratory fitness, muscular strength and endurance, flexibility, body composition, anaerobic power and capacity, speed, agility, and balance (PLO #1 and #4).
3. Explain and utilize the basic components of program design for a variety of sport skills

   and physical activities (PLO #1 and #4).

4. Apply the concept of periodization to training in various sport skills and physical activities (PLO #1 and #2).
5. Perform appropriate techniques for participant screening and health appraisal including risk factors, which may require medical consultation prior to participation in exercise programs (PLO #1 and #2).

6. Perform heart rate and blood pressure, other vital signs, cardiorespiratory endurance, muscular strength and endurance, flexibility, body composition, anaerobic power and capacity, speed, agility, and balance exercise tests as well as utilize the information obtained from these tests in exercise program design (PLO #1, #2, and #4).
7. Describe and perform different types of training programs such as programs for cardiorespiratory endurance, interval training, hypertrophy, strength, high force production and/or explosive power, speed and agility, plyometrics, muscular endurance, circuit training, flexibility, and balance (PLO #1).
8. Compare and contrast the impact of various modes of exercise on body composition and their use in weight control programs (PLO #1).
9. Sensitively identify and explain age, sex, and other individual differences, which should be taken into consideration when designing exercise programs to improve cardiorespiratory fitness, flexibility, body composition, muscular strength and endurance, anaerobic power and capacity, speed, agility, and balance (PLO #5).
10. Identify and demonstrate the proper biomechanics and techniques of training which are necessary to optimize training results and minimize the risk of musculoskeletal injuries (PLO #1 and #4).
11. Describe controversial exercises and appropriate exercise precautions (PLO #1).
12. Identify and explain the issues and principles underlying exercise compliance and motivation as well as other basic concepts related to exercise psychology (PLO #1).
13. Compare, contrast, and critically analyze fitness programs, exercise equipment, and training facilities (PLO #1 and #4).
14. Identify and explain the effects of environmental extremes on performance and exercise prescription (PLO #1).
15. Develop a comprehensive conditioning program based on needs analysis and fitness assessment (PLO #1 and #2).
16. Demonstrate effective communication skills necessary for fitness assessment and evaluation, exercise prescription, and program leadership (PLO #2).

Course Materials

Required Textbook

Schoenfeld, B.J., & Snarr, R.L. (Eds.) (2022). NSCA's essentials of personal training (3rd ed.). Champaign, IL: Human Kinetics. [available from the bookstore, the publisher (NSCA), or online sources such as Amazon, Abe Books, or Chegg Books]

Optional Textbooks

Cisar, C.J., Christensen, C.L., & Cisar, R.B. (2022). Advanced fitness assessment and exercise prescription notebook. San Jose, CA: Maple Press.

Coburn, J.W., & Malek, M.H. (Eds.) (2012). NSCA's essentials of personal training (2nd ed.). Champaign, IL: Human Kinetics. [available from the publisher (NSCA), or online sources such as Amazon, Abe Books, or Chegg Books]

Course Requirements and Assignments

1. This is a course that combines lecture (1 hour/day) and activity (1 hour/day), meeting approximately two hours twice per week. Students are responsible for information presented in lecture and activity sessions via readings which are to be completed prior to arriving to class each day. Communication with the instructor can be accomplished via email (marcos.cepin@sjsu.edu) or Canvas message. Please allow 2 business days for a response. Activity information and assignments are designed to supplement the lecture information and material. Active participation and completion of the reading assignments, written tests, class project, physical performance tests, and class activities are considered essential to the attainment of the course objectives.

2. The first examination will be given on October 14th and the second examination will be given on December 11th, as indicated in the tentative course schedule. The exams will be objective exams consisting of multiple choice, matching, and/or true-false questions; the exams may involve calculations. EXAMS WILL BE GIVEN AT THE SCHEDULED TIME ONLY AND NO MAKE-UP EXAMS WILL BE GIVEN, except for dire and serious illnesses. If this should occur, the instructor must be notified personally PRIOR to the exam. Written documentation providing proof of the inability to attend class on the exam day is required.
3. There will be five quizzes throughout the semester that reinforce material from previous lectures. Each quiz will be given at the beginning of class and will consist of 5 questions. You will have 5 minutes to complete the quiz.
4. ACADEMIC INTEGRITY (from Office of Judicial Affairs). Your own commitment to learning, as evidenced by your enrollment at San Jose State University, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Each student is expected to complete their own work. Use of AI is not allowed for this course. Faculty are required to report all infractions to the office of Judicial Affairs. The policy on academic integrity can be found on the University website.
5. AMERICANS WITH DISABILITIES ACT COMPLIANCE. If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with The Disability Resource Center [(408)924-6000, located in Adm 110] as soon as possible. Presidential Directive 97-03 requires that students with disabilities register with DRC to establish a record of their disability.
6. Fitness screening and testing will be conducted during the course. Students will complete assessments and evaluations of health screening and exercise readiness, muscular strength and endurance, cardiorespiratory fitness, flexibility, body composition, and anaerobic power and capacity, speed, agility, and balance. The fitness assessments and evaluations will be briefly summarized in a report and submitted via Canvas within 1 week. Late reports will receive a 5% deduction each day or partial day. The performance test protocols and evaluation standards are in the course textbook and/or other supplemental course materials.
7. Students will be required to complete a class project during the course that involves the development of a comprehensive 8-week mesocycle conditioning program. Each student will develop the program for herself/himself based on a needs analysis from screening and assessment of hearth rate and blood pressure, other vital signs, muscular strength and endurance, cardiorespiratory fitness, flexibility,

body composition, anaerobic power and capacity, speed, agility and balance. The program will be developed for these assessed components and will be graded on the following criteria: grammar and spelling, needs analysis completed, programs goals outlined, comprehensive 8-week mesocycle (i.e., types of training, identified microcycle/mesocycles, variations within and between microcycle/mesocycle weeks, detailed workouts, and scientific principles used), and nutritional and/or weight control guidelines. Information for the class project is included on Canvas. The class project is **due on or before Tuesday, December 2nd.** Please submit the project to the appropriate assignment on Canvas. **CLASS PROJECTS THAT ARE SUBMITTED LATE WILL RECEIVE A 10% DEDUCTION FOR EACH DAY OR PARTIAL DAY,** except for documented serious reasons.

8. Students are expected to complete the class workouts as indicated in the tentative course schedule. Students must be with the group working out before checking in with the instructor at the end of the activity in order to receive points. The workouts cannot be made-up.

✔ Grading Information

Assignment	Points
Lecture Exam #1	125
Lecture Exam #2	100
Activity Reports	75
Quizzes	25
Class Project	125
Class Workouts	50
Total Points	500

Final Course Grade Assignment

Final course grades will be assigned according to the following scale based on the accumulated total points during the semester. No further points will be given in the course other than rounding of 0.5 or greater to the next whole number. For example, a final percentage of 86.5 will be rounded to a B+, but a percentage of 86.49 will remain a B.

Grade	*Percentage*
A plus	*97 to 100%*
A	*93 to 96%*
A minus	*90 to 92%*
B plus	*87 to 89%*
B	*83 to 86%*
B minus	*80 to 82%*
C plus	*77 to 79%*
C	*73 to 76%*
C minus	*70 to 72%*
D plus	*67 to 69%*
D	*63 to 66%*
D minus	*60 to 62%*
F	*< or = 59%*

University Policies

Per University Policy S16-9 (PDF) (http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance,

counseling, and other resources) are listed on the Syllabus Information (https://www.sjsu.edu/curriculum/courses/syllabus-info.php) web page. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

Course schedule (subject to change with ample notice via Canvas announcement and/or Canvas message)

Week	Date	Topic/Activity	Reading
Week 1			
	8/21	Course Introduction Client Consultation and Health Appraisal	Ch 9
Week 2	8/26	Structure and Function of the Muscular, Nervous, and Skeletal Systems	Ch 1
	8/28	Review of Muscle Anatomy and Biomechanics	Ch 4
Week 3	9/2	Fitness Evaluation Protocols and Norms – Vital Signs and Body Composition	Ch 11 – through body comp
	9/4	Flexibility and Warm-Up/Cooldown Concepts Quiz #1	Ch 12
Week 4	9/9	Resistance Exercise Technique Activity #1	Ch 13

Week	Date	Topic/Activity	Reading
	9/11	Resistance Exercise Technique, cont.	
Week 5	9/16	Resistance Training Program Design Activity #2	Ch 15
	9/18	Resistance Training Program Design Activity #3	Ch 15
Week 6	9/23	Resistance Training for Athletes Quiz #2	Ch 23
	9/25	Cardiorespiratory System Bioenergetics Activity #4	Ch 2, 3
Week 7	9/30	Cardiovascular Exercise Technique	Ch 14
	10/2	Aerobic Training Program Design	Ch 16
Week 8	10/7	Aerobic Training Program Design Quiz #3	Ch 16
	10/9	Exam Review Activity #5	
Week 9	10/14	Exam #1	
	10/16	Responses and Adaptations to Resistance Training	Ch 5

Week	Date	Topic/Activity	Reading
Week 10	10/21	Responses and Adaptations to Aerobic Endurance Training Activity #6	Ch 6
	10/23	Fitness Evaluation, Selection, and Administration	Ch 10
Week 11	10/28	Fitness Evaluation Protocols and Norms – Endurance, Strength, Power, Speed and Agility, Flexibility, Posture	Ch 11 – after body comp
	10/30	Plyometric and Speed Training Activity #7	Ch 17
Week 12	11/4	Plyometric and Speed Training Nutrition Concepts and Strategies Quiz #4 Activity #8	Ch 17, 7
	11/6	Nutrition Concepts and Strategies	Ch 7
Week 13	11/11	No class - Veteran's Day	
	11/13	Exercise Psychology, Goal Setting, and Motivation Activity #9	Ch 8
Week 14	11/18	Special Populations: Preadolescent, Older, or Pregnant	Ch 18

Week	Date	Topic/Activity	Reading
	11/20	Special Populations: Nutritional or Metabolic Concerns Activity #10	Ch 19
Week 15	11/25	Special Populations: Cardiovascular or Respiratory Conditions Quiz #5	Ch 20
	11/27	No class - Happy Thanksgiving!	
Week 16	12/2	Special Populations: Orthopedic, Injury, or Rehabilitation Concerns Class Project Due	Ch 21
	12/4	Exam Review	
Finals Week	12/11	Exam #2 @ 1:00-3:00pm	

Exam schedule (as stated above)

Date	Exam
10/14	Exam #1 (on 1st half of semester material)
12/11	Exam #2 (on 2nd half of semester material)

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class, or do not inform the instructor of your intention to continue in the class within 48 hours of the first class meeting, you will be dropped from the class. Additionally, failing to meet the prerequisites of the class will lead to being dropped from the class.