

*Lecture Contact Hours: 16-18; Outside-of-Class Hours: 32-36;
Laboratory Contact Hours: 32-36; Outside-of-Class Hours: 0;
Total Student Learning Hours: 80-90*

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

Exercise Science 014B – Intermediate Weight Training

1 hour lecture, 1 unit
2 hours laboratory, 0.5 units
Total units: 1.5 units

Catalog Description

This course builds on foundational weight training principles, providing intermediate Instruction in strength and conditioning methods that emphasize muscular endurance, strength and functional movement. Students will deepen their understanding of program design, technique refinement, and adaptations for diverse goals and abilities. Emphasis is placed on inclusive practices that support personal growth, body diversity, and accessible fitness training.

Prerequisite

None

Recommended Preparation

"C" grade or higher or "Pass" in ES 014A or equivalent

Entrance Skills

Without the following skills, competencies and/or knowledge, students entering this course will be highly unlikely to succeed:

- 1) Maintain a written record charting exercises, sets, repetitions and resistance improvements.
- 2) Correctly perform a minimum of one exercise for each major muscle group during each class.
- 3) Identify safety procedures, weight room rules and etiquette.
- 4) Name all of the major muscles of the body that are being exercised.

Course Content

- 1) Intermediate Resistance Training and Safety Principles
 - a. E.G. periodization, tempo, overload, recovery
- 2) Personal Fitness Assessment and Goals
 - a. Individualized progression models for strength and endurance
 - b. Movement modification and accessibility for different abilities and goals
- 3) Exercise Techniques and Adaptation
 - a. Refinement of compound and isolation exercise techniques
- 4) Program Design and Progress Monitoring
 - a. Self-assessment strategies: tracking performance, adjusting load, and evaluating fatigue

Course Objectives

Students will be able to:

- 1) Analyze and apply intermediate principles of strength and endurance training to safely and progressively improve physical function, performance, and wellness.
- 2) Revise and expand personalized training goals to reflect increased fitness knowledge
- 3) Design and implement a structured intermediate-level training program that addresses muscular strength, endurance, recovery, and personal adaptation strategies.

- 4) Evaluate and adjust training variables, such as load, volume, intensity, and rest, using reflective tools and inclusive assessment methods.

Method of Evaluation

A consistent and inclusive grading system will be implemented by the instructor and applied equitably across all students. Assessments will be based on multiple forms of evaluation that align with course outcomes and allow for varied means of demonstrating understanding and progress. The grading components are as follows:

- 1) Quizzes and Knowledge Checks
 - a. Short quizzes and open format assessments to evaluate students' understanding of key concepts, including terminology, safety practices, muscle identification, and principles of strength and endurance training. Multiple formats may be used to support diverse learning styles (e.g., multiple choice, visuals, short answer, open-book)
- 2) Skill Demonstrations and Participation
 - a. Evaluation of students' ability to safely and effectively perform foundational resistance exercises, with opportunities for modification and adaptation. Emphasis is placed on effort, proper form, willingness to apply feedback, and inclusive participation rather than performance benchmarks.
- 3) Personalized Training Program and Progress Reflection
 - a. Students will design and implement an individualized training plan based on personal goals. Progress will be tracked using accessible tools (e.g., training logs, videos, written or verbal reflections). Students will reflect on their experiences, challenges, and adaptations over time.
- 4) Project or Reflective Assessment
 - a. A culmination assignment (written, visual, or multimedia) in which students demonstrate understanding of course content, reflect on their growth, and explain how principles of resistance training can be applied to their own lives in inclusive and sustainable ways.

Special Materials Required of Student

Appropriate attire

Minimum Instructional Facilities

Appropriate gymnasium facility outfitted with barbells, dumbbells, free weights, platforms, machines and adequate space for weightlifting

Method of Instruction

Lecture and demonstration

Peer group activities

Out-of-Class Assignments

- 1) **Reading:** review course materials, digital references, and other multimedia.
- 2) **Writing:** maintaining a fitness log, and more.
- 3) **Other:** N/A.

Texts and References

- 1) Required (representative examples):
 - a. Delavier, Frederic. *Strength Training Anatomy*, 4th Ed. Human Kinetics, 2022.
- 2) Supplemental: None

Exit Skills

Students having successfully completed this course exit with the following skills, competencies and/or knowledge:

- 1) Plan an individual resistance program as well as maintain a written record charting exercises, sets, repetitions and resistance improvements.
- 2) Correctly perform a minimum of two exercises for each major muscle group during each class.

- 3) Improve strength in each major muscle group (shoulder, back, chest, abdomen, arms and legs)
- 4) List safety procedures, weight room etiquette and rules, as well as giving the rationale for each.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Design and demonstrate an intermediate and periodized individual weight training program that aligns with individual fitness goals, physical needs, and training principles.
- 2) Apply intermediate-level exercise science terminology to explain key components of a weight training plan, including exercise selection, compound exercises, estimated 1-rep max, percentage 1-rep max, intensity, volume, rest, and progression.
- 3) Monitor and evaluate personal progress through regular tracking methods, identifying specific major muscles groups, and making informed adjustments to improve performance and outcomes over time