

## EXERCISE SCIENCE (ES)

Courses which meet the activity requirement for graduation have an asterisk (\*). Intercollegiate athletics courses, ES 206, 209, 213, 218, 224, 227, 230, 248, 249, are repeatable. Intercollegiate sports do not meet the activity requirement for graduation. A physical examination is recommended for all classes if the student has medical problems or is over the age of 30. *Due to health and safety considerations, only one Fitness Center class (ES 010, 011, 012) may be taken per semester.*

**Courses Related in Content (see page 35)**

**UC credit limit: Maximum of four units of UC credit for physical activity courses (see page 45).**

### 001\* ADAPTED PHYSICAL EXERCISE 1 UNIT

1 hour lecture, 1 hour laboratory  
Assessment of physical performance status and postural evaluation. Individually prescribed exercise programs for the physically disabled. Recreational games and individual sports adapted to students' capabilities.

*CSU, UC credit limit*

### 009A\* BEGINNING AEROBIC DANCE EXERCISE 1 UNIT

1 hour lecture, 1 hour laboratory  
Aerobic dance exercise with an emphasis on conditioning the musculoskeletal system, improving the cardiovascular system, increasing the efficiency of the respiratory system, and increasing flexibility. Principles of physical fitness, conditioning and other relevant health-related topics will be covered.

*CSU, UC credit limit*

### 009B\* INTERMEDIATE AEROBIC DANCE EXERCISE 1 UNIT

Recommended Preparation: "C" grade or higher or "Pass" in ES 009A or equivalent or specified skill competencies

1 hour lecture, 1 hour laboratory  
A continuation of ES 009A emphasizing the development of an intermediate level of conditioning of the musculoskeletal system, improvement of the cardiovascular system, increasing the efficiency of the respiratory system, and increasing flexibility. More complex movement patterns, routines and equipment will be used to increase intensity of exercise to achieve an increased level of fitness. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered.

*CSU, UC, UC credit limit*

### 009C\* ADVANCED AEROBIC DANCE EXERCISE 1 UNIT

Recommended Preparation: "C" grade or higher or "Pass" in ES 009B or equivalent or specified skill competencies

1 hour lecture, 1 hour laboratory  
A continuation of ES 009B emphasizing the development of an advanced level of conditioning of the musculoskeletal system, improvement of the cardiovascular system, increasing the efficiency of the respiratory system, and increasing flexibility. More complex movement patterns, routines and equipment will be used to increase intensity of exercise to achieve an increased level of fitness. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered.

*CSU, UC, UC credit limit*

### 010\* CARDIOVASCULAR FITNESS AND NUTRITION 1 UNIT

3 hours laboratory  
Kinesiology Lab course designed to teach the benefits of cardiovascular exercise, heart-healthy nutrition guidelines, and to provide opportunities for students to analyze their eating habits. This course requires workouts and consultations with the instructor, as well as written and computer assignments. Each student will be assessed in the areas of fitness and diet. *Due to health and safety considerations, only one Kinesiology Lab class (ES 010, 011, 012) may be taken per semester.*

*CSU, UC credit limit*

### 011\* CIRCUIT TRAINING 1 UNIT

3 hours laboratory  
Kinesiology Lab course designed to develop and encourage positive attitudes and habits with regard to exercise. Each student will be assessed in the areas of body composition, cardiovascular efficiency, muscular strength and endurance, and flexibility. An individual fitness profile will then be established. From this profile, an individual fitness prescription will be developed. Fitness activity will primarily utilize exercise equipment organized into a super circuit. *Due to health and safety considerations, only one Kinesiology Lab class (ES 010, 011, 012) may be taken per semester.*

*CSU, UC credit limit*

### 012\* INDIVIDUALIZED SPORTS CONDITIONING 1 UNIT

3 hours laboratory  
Kinesiology Lab course designed to provide advanced exercisers with the opportunity to increase their fitness levels with an emphasis on strength training and muscle flexibility. An individualized fitness program will then be prescribed utilizing the student's personal fitness goals. *Due to health and safety considerations, only one Kinesiology Lab class (ES 010, 011, 012) may be taken per semester.*

*CSU, UC credit limit*

### 013\* FLEXIBILITY FITNESS 1.5 UNITS

1 hour lecture, 2 hours laboratory  
Flexibility program which provides students with knowledge of their optimal range of motion. Emphasizes participation that suits the needs of all age and ability levels including dancers, athletes, seniors and fitness enthusiasts.

*CSU, UC credit limit*

### 014A\* BEGINNING BODY BUILDING 1.5 UNITS

1 hour lecture, 2 hours laboratory  
Instruction and practice in conditioning, running and resistance exercises with an emphasis on total fitness of the individual.

*CSU, UC credit limit*

### 014B\* INTERMEDIATE BODY BUILDING 1.5 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 014A or equivalent  
1 hour lecture, 2 hours laboratory  
Instruction and practice in weight lifting and weight training with an emphasis on techniques of lifting. Individual program adaptation is stressed.

*CSU, UC credit limit*

### 014C\* ADVANCED BODY BUILDING 1.5 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 014B or equivalent  
1 hour lecture, 2 hours laboratory  
Advanced skills and techniques of body building.

*CSU, UC credit limit*

### 019A\* BEGINNING PHYSICAL FITNESS 1.5 UNITS

1 hour lecture, 2 hours laboratory  
Instruction in physical conditioning, nutrition and weight control.

*CSU, CSU GE, UC credit limit*

### 019B\* INTERMEDIATE PHYSICAL FITNESS 1.5 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 019A or equivalent  
1 hour lecture, 2 hours laboratory  
Further emphasis on individual physical conditioning, nutrition and weight control.

*CSU, CSU GE, UC credit limit*

### 019C\* ADVANCED PHYSICAL FITNESS 1.5 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 019B or equivalent  
1 hour lecture, 2 hours laboratory  
Advanced skills and techniques of physical fitness with an emphasis on new concepts and techniques.

*CSU, CSU GE, UC credit limit*

### 060A\* BEGINNING BADMINTON 1 UNIT

1 hour lecture, 1 hour laboratory  
Presentation of the official singles and doubles games including the six basic strokes, footwork, strategy and etiquette.

*CSU, UC credit limit*

### 060B\* INTERMEDIATE BADMINTON 1 UNIT

Recommended Preparation: "C" grade or higher or "Pass" in ES 060A or equivalent  
1 hour lecture, 1 hour laboratory  
Continuation of ES 060A with an emphasis on playing strategy and match play in singles and doubles.

*CSU, UC credit limit*

### 060C\* ADVANCED BADMINTON 1 UNIT

Recommended Preparation: "C" grade or higher or "Pass" in ES 060B or equivalent  
1 hour lecture, 1 hour laboratory  
Advanced playing techniques, strategy, knowledge and attitudes for students who wish to excel in badminton and increase aerobic capacity.

*CSU, UC credit limit*

### 076A\* BEGINNING TENNIS 1 UNIT

1 hour lecture, 1 hour laboratory  
Presentation of the official singles and doubles games including basic strokes, rules, strategy and etiquette.

*CSU, UC credit limit*

### 076B\* INTERMEDIATE TENNIS 1 UNIT

Recommended Preparation: "C" grade or higher or "Pass" in ES 076A or equivalent  
1 hour lecture, 1 hour laboratory  
Continuation of ES 076A with an emphasis on individual stroke analysis, playing strategy and match play, singles and doubles.

*CSU, UC credit limit*

### 076C\* ADVANCED TENNIS 1 UNIT

Recommended Preparation: "C" grade or higher or "Pass" in ES 076B or equivalent  
1 hour lecture, 1 hour laboratory  
Continuation of ES 076B with an emphasis on advanced techniques, strategy and match play for singles, doubles and mixed doubles.

*CSU, UC credit limit*

### 125A\* BEGINNING GOLF 1 UNIT

1 hour lecture, 1 hour laboratory  
Instruction and practice in basic golf skills to include course conduct, rules and self-evaluation of skills. Practice is limited to development of swing, stance and grip.

*CSU, UC credit limit*

**125B\* INTERMEDIATE GOLF 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 125A or equivalent  
1 hour lecture, 2 hours laboratory

Instruction and practice in golf including skills required to play a small executive course. Students must furnish their own equipment.

*CSU, UC credit limit*

**125C\* ADVANCED GOLF 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 125B or equivalent  
1 hour lecture, 2 hours laboratory

Continuation of ES 125B with an emphasis on advanced techniques, strategies and tournament play. Students must furnish their own equipment.

*CSU, UC credit limit*

**155A\* BEGINNING BASKETBALL 1 UNIT**

1 hour lecture, 1 hour laboratory

Instruction and practice in the basic skills of basketball with an emphasis on individual skill development and team play. Includes the fundamental principles of physical fitness and their impact on lifelong health and wellness.

*CSU, UC credit limit*

**155B\* INTERMEDIATE BASKETBALL 1 UNIT**

Recommended Preparation: "C" grade or higher or "Pass" in ES 155A or equivalent  
1 hour lecture, 1 hour laboratory

Continuation of ES 155A with an emphasis on intermediate level individual skill development, team play, defensive/offensive tactics and team strategies. Includes the fundamental principles of physical fitness and their impact on lifelong health and wellness.

*CSU, UC credit limit*

**155C\* ADVANCED BASKETBALL 1 UNIT**

Recommended Preparation: "C" grade or higher or "Pass" in ES 155B or equivalent  
1 hour lecture, 1 hour laboratory

Continuation of ES 155B with an emphasis on advanced level individual skill development, team play, defensive/offensive tactics and team strategies. Includes the fundamental principles of physical fitness and their impact on lifelong health and wellness.

*CSU, UC credit limit*

**170A\* BEGINNING SOCCER 1 UNIT**

1 hour lecture, 1 hour laboratory

Basic skills and strategy of soccer with an emphasis on team play and individual skills.

*CSU, UC credit limit*

**170B\* INTERMEDIATE SOCCER 1 UNIT**

Recommended Preparation: "C" grade or higher or "Pass" in ES 170A or equivalent  
1 hour lecture, 1 hour laboratory

Intermediate soccer skills and team play with an emphasis on techniques, team strategy, language, and lore of the game of soccer.

*CSU, UC credit limit*

**170C\* ADVANCED SOCCER 1 UNIT**

Recommended Preparation: "C" grade or higher or "Pass" in ES 170B or equivalent  
1 hour lecture, 1 hour laboratory

Advanced individual soccer skills and team play. Emphasizes techniques and team strategy.

*CSU, UC credit limit*

**171A\* BEGINNING SOFTBALL 1 UNIT**

1 hour lecture, 1 hour laboratory

Introduces the basic fundamentals of the game of softball. For individuals of all ages and fitness levels. Emphasizes lifelong health and vigor through exercise and activities. Promotes enjoyment of the game of softball, physical activity, safety, and injury prevention. Includes

individual position skill, and offense and defense strategies.

*CSU, UC credit limit*

**171B\* INTERMEDIATE SOFTBALL 1 UNIT**

Recommended Preparation: "C" grade or higher or "Pass" in ES 171A or equivalent  
1 hour lecture, 1 hour laboratory

Instruction in the fundamentals of the game of softball at the intermediate level. For individuals of all ages and fitness levels. Emphasizes lifelong health and vigor through exercise and activities. Promotes enjoyment of the game of softball, physical activity, safety, and injury prevention. Includes individual position skill, and offense and defense strategies.

*CSU, UC credit limit*

**171C\* ADVANCED SOFTBALL 1 UNIT**

Recommended Preparation: "C" grade or higher or "Pass" in ES 171B or equivalent  
1 hour lecture, 1 hour laboratory

Instruction in the game of softball at the advanced level. For individuals of all ages and fitness levels. Emphasizes lifelong health and vigor through exercise and activities. Promotes enjoyment of the game of softball, physical activity, safety, and injury prevention. Includes individual position skill, and offense and defense strategies.

*CSU, UC credit limit*

**175A\* BEGINNING VOLLEYBALL 1 UNIT**

1 hour lecture, 1 hour laboratory

Competency development in the team sport of volleyball with an emphasis on individual techniques and team strategy.

*CSU, UC credit limit*

**175B\* INTERMEDIATE VOLLEYBALL 1 UNIT**

Recommended Preparation: "C" grade or higher or "Pass" in ES 175A or equivalent  
1 hour lecture, 1 hour laboratory

Continuation of ES 175A with an emphasis on intermediate level play and strategy and four-person teams.

*CSU, UC credit limit*

**175C\* ADVANCED VOLLEYBALL 1 UNIT**

Recommended Preparation: "C" grade or higher or "Pass" in ES 175B or equivalent  
1 hour lecture, 1 hour laboratory

Continuation of ES 175B with an emphasis on advanced play and strategy and four-person teams.

*CSU, UC credit limit*

**180\* SELF DEFENSE FOR WOMEN 1 UNIT**

1 hour lecture, 1 hour laboratory

Basic principles of practical personal protection for women with an emphasis on awareness and prevention of situations that may leave a person vulnerable to crime, especially rape. Physical, mental and verbal responses will be taught and practiced so that students may develop the confidence to stand up and defend themselves, if needed. Students will learn the fundamental principles of physical fitness and its impact on lifelong health and wellness.

*CSU, UC credit limit*

**181A\* KARATE I 1.5 UNITS**

1 hour lecture, 2 hours laboratory

Introduction and practice in the basic skills and philosophy of Shotokan karate. Introduces the basic stances, blocks, and kicks.

*CSU, UC credit limit*

**181B\* KARATE II 1.5 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ES 181A or equivalent or possession of equivalent proficiency (8th kyu ranking in Shotokan karate from ASKA, JKA, AJKA)

1 hour lecture, 2 hours laboratory

Introduction and practice in the intermediate skills and philosophy of Shotokan karate.

Introduces intermediate level blocks, strikes, punches and kicks, which will be taught individually and then linked and practiced in two and three movement combinations. Covers the timing and distancing for three-step sparring without a count and the proper performance and timing of kata Heian Nidan.

*CSU, UC credit limit*

**181C\* KARATE III 1.5 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ES 181B or equivalent or possession of equivalent proficiency (7th kyu ranking in Shotokan karate from ASKA, JKA, AJKA)

1 hour lecture, 2 hours laboratory

Introduction and practice in the high intermediate skills and philosophy of Shotokan karate. Introduces intermediate II level strikes and blocks, three-move combinations, one step sparring—attacking and defending against face, stomach and front kick—and kata Heian Sandan.

*CSU, UC credit limit*

**181D\* KARATE IV 1.5 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ES 181C or equivalent or possession of equivalent proficiency (6th kyu ranking in Shotokan karate from ASKA, JKA, AJKA)

1 hour lecture, 2 hours laboratory

Introduction and practice in the advanced skills and philosophy of Shotokan karate. Introduces advanced level blocks and strikes, four-move combinations, one-step sparring without a count for five techniques, and kata Heian Yondan.

*CSU, UC credit limit*

**206 INTERCOLLEGIATE BASKETBALL 2 UNITS**

Prerequisite: Tryout

5 hours lecture, 5 hours laboratory

Intercollegiate competition in the sport of basketball. Instruction in specific skills, performance techniques and strategies, as well as daily practice, development of physical fitness, team travel and competition against other collegiate institutions. Open to all students who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*

*CSU, UC credit limit*

**209 INTERCOLLEGIATE CROSS-COUNTRY 2 UNITS**

Prerequisite: Tryout

5 hours lecture, 5 hours laboratory

Open to students with advanced cross-country skills who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*

*CSU, UC credit limit*

**213 INTERCOLLEGIATE GOLF 2 UNITS**

Prerequisite: Tryout

5 hours lecture, 5 hours laboratory

Instruction in team play and strategy. Competition in practice and league play. *Athletic insurance fee is required. Repeatable.*

*CSU, UC credit limit*

**218 INTERCOLLEGIATE SOCCER 2 UNITS**

Prerequisite: Tryout

5 hours lecture, 5 hours laboratory

Open to students with advanced soccer skills who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*

*CSU, UC credit limit*

**224 INTERCOLLEGIATE TENNIS 2 UNITS**

Prerequisite: Tryout

5 hours lecture, 5 hours laboratory

Intercollegiate competition in the sport of tennis. Instruction in specific skills, performance techniques and strategies, as well as daily practice, development of physical fitness, team

travel and competition against other collegiate institutions. Open to all students who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*

*CSU, UC credit limit*

**227 INTERCOLLEGIATE TRACK 2 UNITS**

Prerequisite: Tryout

5 hours lecture, 5 hours laboratory

Open to students with advanced track skills who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*

*CSU, UC credit limit*

**230 INTERCOLLEGIATE VOLLEYBALL 2 UNITS**

Prerequisite: Tryout

5 hours lecture, 5 hours laboratory

Intercollegiate competition in the sport of volleyball. Instruction in specific skills, performance techniques and strategies, as well as daily practice, development of physical fitness, team travel and competition against other collegiate institutions. Open to all students who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*

*CSU, UC credit limit*

**248 CONDITIONING FOR INTERCOLLEGIATE ATHLETES 1 UNIT**

Prerequisite: Recommendation of Intercollegiate Coach

1 hour lecture, 1 hour laboratory

Physical conditioning and mastery of the basic fundamentals of movement and skills necessary to reduce the risk of injury associated with athletic activity. Conditioning activities, games, and resistance exercises will be emphasized. This course is intended for intercollegiate athletes who are proficient in the fundamental skills and have knowledge of the basic rules of the competitive sport. Instruction is geared toward advanced techniques, strategies, injury prevention, conditioning, and team play. *Athletic insurance fee is required. Repeatable.*

*CSU*

**249 COMPETENCIES FOR INTERCOLLEGIATE ATHLETES 2-4 UNITS**

Prerequisite: Recommendation of Intercollegiate Coach

1 hour lecture, 3 hours laboratory, 2 units

1 hour lecture, 6 hours laboratory, 3 units

1 hour lecture, 9 hours laboratory, 4 units

This course is designed to prepare student athletes for intercollegiate competition at both the two and four year level, and to maintain athletic conditioning between seasons. It is intended for students who have demonstrated the potential (through performance or interview with respective coach) to succeed in intercollegiate athletics. Students will be required to participate in lab hours within the intercollegiate sport of their choice. *Athletic insurance fee may be required upon enrollment. Repeatable.*

*CSU*

**250 INTRODUCTION TO KINESIOLOGY 3 UNITS**

*C-ID KIN 100*

3 hours lecture

Introduction to the interdisciplinary approach to the study of human movement. An overview of the concepts within and importance of the sub-disciplines in kinesiology will be discussed, along with career opportunities in the areas of teaching, coaching, allied health, dietetic, and fitness professions.

*CSU, UC*

**253 PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS 3 UNITS**

2.5 hours lecture, 1.5 hours laboratory

The statewide program in physical education for elementary schools forms the basis for this course. Includes the study of child development, personality development, analysis and practice of fundamental skills, selection of activities, organizational materials, and evaluation of teaching ability.

*CSU*

**254 PRINCIPLES OF PERSONAL TRAINING 3 UNITS**

3 hours lecture

Identification and study of the techniques, responsibilities and skills necessary to perform the duties of a personal trainer. Emphasizes current knowledge of health principles that pertain to fitness and wellness. Provides the necessary information to pass the Personal Trainer Certification Exams for national certifying organizations (ACE, NSCA, etc.). Hands-on lab training in the use of fitness equipment.

*CSU*

**254L FIELD EXPERIENCE FOR PERSONAL TRAINERS 1 UNIT**

Prerequisite: "C" grade or higher or "Pass" in ES 254 or equivalent

4 hours unpaid work experience per week

Volunteer work experience in the field of personal training in selected fitness facilities. Students will work under the direct supervision of a certified Exercise Science instructor or commercially certified personal trainer.

*CSU*

**255 CARE AND PREVENTION OF ATHLETIC INJURIES 3 UNITS**

3 hours lecture, 1 hour laboratory

Designed to (1) provide a background for individuals interested in an athletic training career, (2) develop an understanding of athletic injuries in terms of prevention, recognition, evaluation, treatment, first aid and emergency care for coaches and/or teachers in athletic settings, and (3) provide athletes with an understanding of how to manage their own injuries and methods of prevention.

*CSU, UC credit limit*

**270 COOPERATIVE GAMES 1 UNIT**

1 hour lecture

Instruction in planning and implementing cooperative games for physical education/activities involving pre-school and elementary school-age children in a variety of settings. The philosophy behind the need for cooperative games will be explored, as well as the importance of incorporating movement into daily life.

*CSU, UC credit limit*

**271 FITNESS WALKING WITH CHILDREN 1 UNIT**

1 hour lecture

Instruction in planning and implementing a walking program for children in a variety of settings. Lifelong fitness activities and walking as a form of appropriate and challenging exercise will be emphasized.

*CSU*

**272 ISSUES IN CHILDHOOD OBESITY 1 UNIT**

1 hour lecture

Survey of current knowledge relating to the cause and prevention of childhood obesity. Content will include suggested physical activity planning and nutrition guidelines, as well as historically relevant trends in regards to childhood obesity, diet and physical activity.

*CSU*

**273 FIELD EXPERIENCE IN SCHOOL-BASED RECREATIONAL LEADERSHIP 1 UNIT**

5 hours paid or 4 hours unpaid work experience per week

Under supervision at approved field placement sites, students will participate in all outdoor recreational activities: develop and supervise fitness and recreational experiences, conduct group activities, handle routines, and respond to individual and group needs of school-age children in a school-based, day care or school day environment.

*CSU*