

EXERCISE SCIENCE (ES)

Students should progress from Beginning to Intermediate and to Advanced levels in the courses that have an "ABC" designation to facilitate success. Students should not move backward in levels. The only courses that may be repeated are the Intercollegiate Athletic courses numbered 200-240, 262, and 263, which may be taken four (4) times maximum. Intercollegiate athletic courses do NOT meet the Associate Degree fitness/wellness requirement. No other Exercise Science course may be repeated for credit.

Adapted Exercise Science courses 001, 002, 003, 029, 030, 035, and 041 have been designed to meet the needs of the students participating in the Disabled Students Program. For other course offerings related to the Disabled Students Program, see Personal Development-Special Services.

ES-001

Adapted Physical Exercise

1 UNITS

1.0 hours lecture, 1.0 hours laboratory

This course is designed to develop various components of physical fitness for students with verified disabilities. Physical assessment, appropriate exercise equipment and personalized exercise program will be prescribed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-002

Advanced Adapted Physical Exercise

1 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 001 or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Advanced physical exercise course designed for students with verified disabilities. Emphasis placed on muscular fitness through resistance exercises. Physical assessment, appropriate exercise equipment and personalized prescribed weight training programs will be developed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-003

Adaptive Aerobic Fitness

1 UNITS

1.0 hours lecture, 1.0 hours laboratory

This course is designed to provide a fitness exercise program for students with verified disabilities. Includes methods of strength attainment and flexibility training, with emphasis on aerobic conditioning. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-004A

Beginning Fitness for the Newcomer

1 UNITS

1.0 hours lecture, 1.0 hours laboratory

This course is designed to provide a beginning level of a personalized total body fitness program for individuals who are tentative or deficient in physical fitness skills. This course is intended for the student who is not ready to participate in a regular fitness class, but is not in need of a truly adapted fitness class. Instruction will include the development of a basic level of cardiovascular endurance, muscular strength, muscular endurance, flexibility, body composition, core strength, balance and equipment use. Direction will include introductory recommendations necessary to personalize an exercise program to meet individual conditions, limitations and special needs. Influences of nutrition, as well as health concerns, injury prevention and life-long health and wellness will be included. (CSU/UC) (AA/AS-E)

ES-004B

Intermediate Fitness for the Newcomer

1 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 004A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course is a continuation of ES 004A which is designed to provide a personalized total body fitness program for individuals who are tentative or deficient in physical fitness skills. This course is intended for the student who is not ready to participate in a regular fitness class, but is not in need of a truly adapted fitness class. Instruction will include the development of an intermediate level of cardiovascular endurance, muscular strength, muscular endurance, flexibility, body composition, core strength, balance and equipment use. Direction will include relatively complex recommendations necessary to personalize an exercise program to meet individual conditions, limitations and special needs. Influences of nutrition, as well as health concerns, injury prevention and life-long health and wellness will be included. (CSU) (AA/AS-E)

ES-004C

Advanced Fitness for the Newcomer

1 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 004B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course is a continuation of ES 004B which is designed to provide a personalized total body fitness program for individuals who are tentative or deficient in physical fitness skills. This course is intended for the student who is not ready to participate in a regular fitness class, but is not in need of a truly adapted fitness class. Instruction will include the development of an advanced level of cardiovascular endurance, muscular strength, muscular endurance, flexibility, body composition, core strength, balance and equipment use. Direction will include detailed recommendations necessary to personalize an exercise program to meet individual conditions, limitations and special needs. Influences of nutrition, as well as health concerns, injury prevention and life-long health and wellness will be included. (CSU) (AA/AS-E)

ES-005A

Beginning Cardio Fitness and Resistance Training

1.5 UNITS

1.0 hours lecture, 2.0 hours laboratory

This course is designed to provide a beginning level fitness experience to develop the key components of health-related physical fitness: cardiorespiratory endurance, muscular strength and muscle endurance, body composition, and flexibility. Emphasis will be placed on the latest scientific theories for cardiorespiratory exercises and correct lifting techniques of resistance training. The students will develop a personalized cardiorespiratory endurance, muscular strength, muscular endurance, and flexibility program. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-005B**Intermediate Cardio Fitness and Resistance Training 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 005A or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

A continuation of ES 005A emphasizing the development and model of an intermediate level of cardio-respiratory fitness and resistance training. Students will complete more physical challenging activities to achieve an intermediate level of cardio-respiratory endurance, muscular strength/endurance, body composition and flexibility. Exercise theories, training methods, nutritional influences on exercise and body composition, and injury prevention/treatment will be presented. A wide range of cardiovascular activities and resistance training equipment are utilized. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-005C**Advanced Cardio Fitness and Resistance Training 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 005B or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

A continuation of ES 005B emphasizing the formulation and design of an advanced level of cardiorespiratory fitness and resistance training. Students will complete more physical challenging activities to achieve an advanced level of cardiovascular endurance, muscular strength/endurance, body composition, and flexibility. Exercise theories, training methods, nutritional influences on exercise and body composition, and injury prevention/treatment will be presented. A wide range of cardiovascular activities and resistance training equipment are utilized. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-006A**Beginning Fitness Circuit 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed to provide a full body workout that mixes aerobic and resistance training in a circuit format. utilizing of variable resistance machines, free weights, indoor cycling bikes, and other modes of aerobic training. The circuit involves a personalized workload which allows students to progress at their own rate while alternating between resistance machines/free weights, and indoor cycling bicycles or other aerobic activities. Fitness training principles to improve the components of fitness (cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition) are presented with a focus on proper form. In addition, students will explore nutrition and disease-prevention to assist in creating a healthy lifestyle. (CSU/UC) (AA/AS-E)

ES-006B**Intermediate Fitness Circuit 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 006A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 006A emphasizing the development of an intermediate level of circuit training. This course is designed to provide a full body workout that mixes aerobic and resistance training in a circuit format utilizing of variable resistance machines, free weights, indoor cycling bikes, and other modes of aerobic training. The circuit involves a personalized workload which allows students to progress at their own rate while alternating between resistance machines/free weights, and indoor cycling bicycles or other aerobic activities. Fitness training principles to improve the components of fitness (cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition) are presented with a focus on proper form. In addition, students will explore nutrition and disease-prevention information to assist in creating a healthy lifestyle. (CSU/UC) (AA/AS-E)

ES-006C**Advanced Fitness Circuit 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 006B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 006B emphasizing the development of an advanced level of circuit training. This course is designed to provide a full body workout that mixes aerobic and resistance training in a circuit format. utilizing of variable resistance machines, free weights, indoor cycling bikes, and other modes of aerobic training. The circuit involves a personalized workload which allows students to progress at their own rate while alternating between resistance machines/free weights, and indoor cycling bicycles or other aerobic activities. Fitness training principles to improve the components of fitness (cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition) are presented with a focus on proper form. In addition, students will explore nutrition and disease-prevention information to assist in creating a healthy lifestyle. (CSU/UC) (AA/AS-E)

ES-007A**Beginning Aerobic Walking for Fitness and Wellness 1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

Instruction and reinforcement in basic fitness walking techniques with a specific intent to develop cardiovascular fitness and endurance to a beginning level. Students will also analyze the impact of aerobic walking on other fitness parameters such as muscle endurance and body composition. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-007B**Intermediate Aerobic Walking for Fitness and Wellness 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 007A or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

A continuation of ES 007A emphasizing intermediate level fitness walking techniques at moderate intensity to increase cardiovascular fitness and endurance to an intermediate level. Students will also analyze the impact of aerobic walking on other fitness parameters such as muscle endurance and body composition. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-007C**Advanced Aerobic Walking for Fitness and Wellness 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 007B or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

A continuation of ES 007B emphasizing advanced level fitness walking techniques at high intensity and longer duration to increase cardiovascular fitness and endurance to an advanced level. Students will also analyze the impact of high intensity aerobic walking and increased duration on other fitness parameters such as muscle endurance and body composition. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-008A**Beginning Indoor Cycling 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed to provide a beginning level indoor cycling experience to develop the key components of health-related physical fitness: cardiorespiratory, endurance, muscular strength/endurance, body composition, and flexibility. The components of fitness will be met through structured individually paced indoor group cycling classes. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-008B**Intermediate Indoor Cycling 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 008A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 008A emphasizing the development of an intermediate level of indoor cycling. Students will complete physical challenging activities to achieve an intermediate level of cardiorespiratory endurance, muscular strength/endurance, body composition, and flexibility. Intermediate exercise theories will be met through structured indoor cycling methods and practices. Students will also interpret principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-008C**Advanced Indoor Cycling 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 008B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 008B emphasizing the development of advanced level of indoor cycling. Students will complete physical challenging activities to achieve an advanced level of cardiorespiratory endurance, muscular strength/endurance, body composition, and flexibility. Advanced exercise theories will be met through structured indoor cycling methods and practices. Students will also summarize principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-009A**Beginning Aerobic Dance Exercise 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Participation in aerobic dance exercise emphasizing the development of a basic level of conditioning of the musculoskeletal system, improvement of the cardiovascular system, increasing the efficiency of the respiratory system, and increasing flexibility. Beginning level movement patterns, routines and equipment will be used. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-009B**Intermediate Aerobic Dance Exercise 1 UNITS**

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

1.0 hours lecture, 1.0 hours 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) (AA/AS-E)

ES-009C**Advanced Aerobic Dance Exercise 1 UNITS**

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

1.0 hours lecture, 1.0 hours 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. Highly complex movement patterns, routines and equipment will be used to increase intensity of exercise to achieve a superior level of fitness. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-016A**Beginning Trail Running 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This is a beginning trail running course where students will develop basic skills for trail running. This course gives students basic information and exposure to a variety of regional trails while teaching about trail navigation, etiquette, running strategies, nutrition, and the basic gear necessary for trail running. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-016B**Intermediate Trail Running 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 016A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 016A, this course provides instruction and practice to develop intermediate skills for trail running. This course gives students intermediate information and exposure to a variety of regional trails while teaching about trail navigation, etiquette, running strategies, nutrition, and the basic gear necessary for trail running. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-016C**Advanced Trail Running****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 016B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 016B, this course provides instruction and practice to develop advanced skills for trail running. This course gives students advanced information and exposure to a variety of regional trails while teaching about trail navigation, etiquette, running strategies, nutrition, and the basic gear necessary for trail running. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-017A**Beginning Trail Hiking****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course serves as an introduction to trail hiking and involves the exploration of local trails surrounding the campus. This activity class is designed to promote a higher level of fitness, and the basic knowledge sufficient to hike during leisure time in an outdoor environment. Major topics include: appropriate clothing and footwear, equipment, safety, exercise benefits and training principles, Leave No Trace outdoor ethics, navigation and enjoyment of outdoor exploration. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. This course requires the ability to walk outside on trails, which are often uneven surfaces, in all types of weather indicative of the San Diego climate. (CSU/UC) (AA/AS-E)

ES-017B**Intermediate Trail Hiking****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 017A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 017A emphasizing the development of an intermediate level trail hiking. Students will complete more physically challenging hikes to achieve an intermediate level of fitness. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-017C**Advanced Trail Hiking****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 017B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 017B emphasizing the development of an advanced level trail hiking. Students will complete more physically and mentally challenging hikes to achieve an advanced level of fitness. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-021A**Beginning Fitness for Chronic Disease And Injury Prevention****1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

This course is designed for physical activity and information to meet the needs of a population at risk for chronic disease or injury that potentially reduce the quality of life. Principles of physical fitness, conditioning, and other relevant health-related topics will be covered. Emphasis will be placed on the development of a basic level of preventive lifestyle practices that research has shown to reduce the chances of developing and/or severity of heart disease, osteoporosis, diabetes, stroke and other chronic diseases. This will include beginning level equipment use, movement and balance exercises. (CSU/UC) (AA/AS-E)

ES-021B**Intermediate Fitness for Chronic Disease And Injury Prevention****1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 021A or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

This course is a continuation of ES 021A providing physical activity and information to meet the needs of a population at risk for chronic disease or injury that potentially reduce the quality of life. Principles of physical fitness, conditioning, and other relevant health-related topics will be covered. Emphasis will be placed on the development of an intermediate level of preventive lifestyle practices that research has shown to reduce the chances of developing and/or severity of heart disease, osteoporosis, diabetes, stroke and other chronic diseases. This will include added complexity of equipment use, movement and balance exercises to achieve an increased level of fitness. (CSU/UC) (AA/AS-E)

ES-021C**Advanced Fitness for Chronic Disease and Injury Prevention****1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 021B or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

This course is a continuation of ES 021B providing physical activity and information to meet the needs of a population at risk for chronic disease or injury that potentially reduce the quality of life. Principles of physical fitness, conditioning, and other relevant health-related topics will be covered. Emphasis will be placed on the development of an advanced level of preventive lifestyle practices that research has shown to reduce the chances of developing and/or severity of heart disease, osteoporosis, diabetes, stroke and other chronic diseases. This will include added highly complex equipment use, movement and balance exercises to achieve an increased level of fitness. (CSU/UC) (AA/AS-E)

ES-022**Total Body Conditioning****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This purpose of this course is to provide students with an exercise program designed to develop the key components of health-related physical fitness: cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition. Emphasis will be placed on the latest scientific theories and conditioning modalities, and how to apply the principles to a home-based and lifelong conditioning program. Activities focus on a wide range of aerobic circuits, body weight activities, calisthenic-type exercises, and stability/mobility movements. In addition, students will explore nutrition principles and other factors for making healthy lifestyle choices. (CSU/UC) (AA/AS-E)

ES-023A**Beginning Resistance Training****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course provides instruction and practice in resistance training with emphasis in beginning level use of resistance exercise machines, free weights, and other equipment. Emphasis will be placed on the latest scientific theories and correct lifting techniques of resistance training. The students will develop a personalized muscular strength, muscular endurance, and flexibility program. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-023B**Intermediate Resistance Training****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 023A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 023A, this course provides instruction and practice in resistance training with emphasis in intermediate level use of resistance exercise machines, free weights, and other equipment. Emphasis will be placed on the latest scientific theories and correct lifting techniques of resistance training. Students will develop a personalized intermediate level muscular strength, muscular endurance, and flexibility program. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-023C**Advanced Resistance Training****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 023B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 023B, this course provides instruction and practice in resistance training with emphasis in advanced level use of resistance exercise equipment. Emphasis will be placed on the latest scientific theories and correct lifting techniques of resistance training specifically for power and Olympic lifts and plyometrics. Students will develop a personalized muscular strength, muscular endurance, and flexibility program. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness.

ES-024A**Beginning Fitness Boot Camp****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course presents a fast-paced, regimented-style exercise program designed at a beginning level that works the entire body through the use of calisthenics, running, body resistance training and agility drills designed to promote physical fitness and weight control. Using a variety of activities, emphasis will be placed on self-discipline, intensity, and goal-oriented basic exercise programming. The course will utilize numerous training modalities including cross-training, basic boxing, plyometrics, speed and agility, core stability, flexibility training as well as cardiovascular endurance. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-024B**Intermediate Fitness Boot Camp****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 024A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 024A emphasizing the development of an intermediate program of fast-paced, regimented style exercise that works the entire body through the use of calisthenics, running, body resistance training and agility drills designed to promote physical fitness and weight control. Using a variety of relatively complex and moderately intense activities, emphasis will be placed on self-discipline, intensity, and goal-oriented intermediate exercise programming. The course will utilize numerous training modalities including cross-training, basic boxing, plyometrics, speed and agility, core stability, flexibility training as well as cardiovascular endurance. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-024C**Advanced Fitness Boot Camp****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 024B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 024B emphasizing the development of an advanced program of fast-paced, regimented style exercise that works the entire body through the use of calisthenics, running, body resistance training and agility drills designed to promote physical fitness and weight control. Using a variety of highly intense activities having challenging complexity, emphasis will be placed on self-discipline, intensity, and goal-oriented advanced exercise programming. The course will utilize numerous training modalities including cross-training, basic boxing, plyometrics, speed and agility, core stability, flexibility training as well as cardiovascular endurance. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-026**Stress Reduction Through Movement and Mindfulness****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

The course serves as an introduction to stress-reduction practice with emphasis on developing mindfulness-based techniques to improve mind-body awareness. Students will participate in a variety of techniques and practical movement exercises that allow for in-depth personal exploration of awareness in everyday life. In addition, students will learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-027A**Beginning Tai Chi Ch'uan****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course introduces the fundamental concepts of T'ai Chi Ch'uan. This ancient Chinese exercise form consists of a series of classical martial arts postures which gracefully flow together in slow motion. It benefits health and wellness by emphasizing mental tranquility, inner awareness, relaxation, stress reduction, muscle control and flexibility. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-027B**Intermediate Tai Chi Ch'uan****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 027A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course introduces the intermediate concepts of T'ai Chi Ch'uan. This ancient Chinese exercise form consists of a series of classical martial arts postures which gracefully flow together in slow motion. It benefits health and wellness by emphasizing mental tranquility, inner awareness, relaxation, stress reduction, muscle control and flexibility. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-027C**Advanced T'ai Chi Ch'uan 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 027B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course introduces the advanced concepts of T'ai Chi Ch'uan. This ancient Chinese exercise form consists of a series of classical martial arts postures which gracefully flow together in slow motion. It benefits health and wellness by emphasizing mental tranquility, inner awareness, relaxation, stress reduction, muscle control and flexibility. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-028A**Beginning Yoga 1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

This course is designed to help students increase flexibility and balance as well as practice relaxation and stress reduction through beginning Hatha Yoga techniques. The course will focus on safe, effective stretching, balance, stability of supporting muscle groups and breathing techniques. Discussion regarding history and the traditions of Hatha Yoga as well as stress reduction will take place. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-028B**Intermediate Yoga 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 028A or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

A continuation of ES 028A emphasizing the development of an intermediate level of flexibility and balance, as well as practice relaxation and stress reduction through Hatha Yoga techniques. The course will focus on safe, effective stretching, balance, stability of supporting muscle groups and breathing techniques. Intermediate poses and techniques will be introduced to increase flexibility, strength, balance, and deeper levels of stress reduction. Discussion of the history and traditions of Hatha Yoga and stress reduction methods will take place. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-028C**Advanced Yoga 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 028B or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

A continuation of ES 028B emphasizing the development of an advanced level of flexibility and balance, as well as the practice of relaxation and stress reduction through Hatha Yoga techniques. The course will focus on safe, effective stretching, balance, stability of supporting muscle groups and breathing techniques. Advanced poses and techniques will be introduced to increase flexibility, strength, balance, and deeper levels of stress reduction. Discussion of the history and traditions of Hatha Yoga will take place. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-029**Adapted Yoga 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course provides basic yoga skills and practice for students with verified disabilities. Emphasis on muscular endurance, balance, flexibility, relaxation and stress reduction through modified traditional yoga postures and stretches. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-030**Adaptive Aquatic Sports Education 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

A class for students with verified disabilities providing various aquatic sports and activities. This class is designed to offer the student experiences in competitive swimming, water polo, other aquatic games and conditioning exercises. Personalized programs will be designed and developed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-035**Adapted Swimming Limited 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course offers instruction and practice in basic swimming and aquatic skills for students with verified disabilities. Emphasis on cardiorespiratory and muscular endurance, stroke mechanics and water safety through a personalized aquatic program. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-037A**Beginning Springboard Diving 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 039 or equivalent or basic swimming/water safety skills.

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in beginning diving skills necessary to use the one meter and three meter diving boards with emphasis on board work, front and back approaches, front and back jumps, and front and back line-ups. Individuals enrolling in this class should have basic swimming skills. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-037B**Intermediate Springboard Diving 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 037A or equivalent or specified skill competencies; and a "C" grade or higher or "Pass" in ES 039 or equivalent or basic swimming/water safety skills.

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in the intermediate diving skills necessary to use the one meter board with emphasis on board work, front and back approaches, front and back jumps, and front and back line-ups. Individuals enrolling in this class should have beginning swimming skills. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-037C**Advanced Springboard Diving****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 037B or equivalent or specified skill competencies; and a "C" grade or higher or "Pass" in ES 039 or equivalent or basic swimming/water safety skills.

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in advanced diving skills necessary to use the one meter and three meter boards with emphasis on board work, front and back approaches, front and back jumps, and front and back line-ups.

Individuals enrolling in this class should have basic swimming skills.

Students will also learn the fundamental principles of physical fitness and their impact on life-long health. (CSU/UC) (AA/AS-E)

ES-039**Swimming for Nonswimmers****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This class is for students who have a fear of the water and cannot swim or who are so deficient in basic aquatic skills that they would be unsafe in and around water. This class will aid students to become comfortable and safe in an aquatic environment. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-040A**Beginning Aquatic Fitness****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 039 or basic comfort level in and around an aquatic environment.

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in water aerobics exercise. An emphasis will be placed on the development of a basic level of conditioning in the areas of muscular strength and endurance, improvement and efficiency of the cardiovascular system, and improving body composition. Beginning level movement patterns in the water while using resistive and flotation equipment. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-040B**Intermediate Aquatic Fitness****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 040A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of aquatic fitness ES 040A. An emphasis will be placed on the development of an intermediate level of conditioning in the areas of muscular strength and endurance, improvement and efficiency of the cardiovascular system, and improving body composition. More intense intermediate level movement patterns in the water while using resistive and flotation equipment. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-040C**Advanced Aquatic Fitness****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 040B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of aquatic fitness ES 040B. An emphasis will be placed on the development of an advanced level of conditioning in the areas of muscular strength and endurance, improvement and efficiency of the cardiovascular system, and improving body composition. More intense advanced level movement patterns in the water while using resistive and flotation equipment. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-041**Adapted Water Aerobics****1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

This class is designed to provide a personalized water exercise program for individuals with permanent or temporary limitations. Instruction and practice will include cardiovascular endurance, muscular endurance, flexibility, core strength and balance through an instructor-lead water aerobic class. Instruction will also include influences of basic nutrition, principles of physical fitness and life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-043A**Beginning Swimming****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 039 or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course is designed for students who have had little or no swimming experience. Instruction will focus on basic swimming strokes and skills for beginners. Strokes and skills to be covered include front crawl with rotational breathing, swimming proprioception, elementary backstroke, backstroke, sidestroke, breaststroke, comfort in the deep end of the pool, treading water, and basic dive entering. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-043B**Intermediate Swimming****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 043A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course is a continuation of ES 043A with instruction focusing on reinforcing swimming strokes and skills for beginners. Strokes and skills to be covered include front crawl with rotational breathing, swimming proprioception, elementary backstroke, backstroke, sidestroke, breaststroke, comfort in the deep end of the pool, treading water, and basic dive entering. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-043C**Advanced Swimming****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 043B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course is a continuation of ES 043B with instruction focusing on advanced swimming strokes and skills. Strokes and skills to be covered include front crawl with rotational breathing, backstroke, sidestroke, breaststroke, 50-meter lap swim, treading water, flip turns, and competitive dive entering. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-044A**Beginning Lap Swimming for Health and Fitness****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 039 or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course is designed for beginning lap swimmers who have acquired basic swimming techniques. Students are instructed in beginning level workouts which will improve cardiovascular endurance. Flexibility, exercises, nutrition and proper training techniques will be included in the course of study. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-044B**Intermediate Lap Swimming for Health and Fitness 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 044A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course is designed for lap swimmers who have acquired intermediate swimming techniques. Students are instructed in intermediate level workouts which will improve cardiovascular endurance. Flexibility, exercises, nutrition and proper training techniques will be included in the course of study. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-044C**Advanced Lap Swimming for Health and Fitness 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 044B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This course is designed for lap swimmers who have acquired advanced swimming techniques. Students are instructed in advanced level workouts which will improve cardiovascular endurance. Flexibility, exercises, nutrition and proper training techniques will be included in the course of study. Principles of physical fitness, conditioning and other relevant health-related topics will also be covered. (CSU/UC) (AA/AS-E)

ES-047**Lifeguard Training 2 UNITS**

Prerequisite: Successful completion of ES-043B or equivalent.

Demonstrated ability to swim 500 yards continuously using these strokes in the following order: 200 yards of front crawl using rhythmic breathing and a stabilizing, propellant kick; 100 yards breaststroke; 200 yards of either front crawl or breaststroke (these 200 yards may be a mixture of front crawl and breaststroke). Swim 20 yards using front crawl or breaststroke, surface dive to a depth of 7-10 feet, retrieve a 10-pound object, return to surface, and swim 20 yards back to the starting point with the object.

2.0 hours lecture, 1.0 hours laboratory

Prerequisite: A ?C? grade or higher or ?Pass? in ES 043B or equivalent. Demonstrated ability to swim 500 yards continuously using these strokes in the following order: 200 yards of front crawl using rhythmic breathing and a stabilizing, propellant kick; 100 yards breaststroke; 200 yards of either front crawl or breaststroke (these 200 yards may be a mixture of front crawl and breaststroke). Swim 20 yards using front crawl or breaststroke, surface dive to a depth of 7 ? 10 feet, retrieve a 10-pound object, return to surface, and swim 20 yards back to the starting point with the object. Instruction in lifeguarding and lifesaving techniques, cardiopulmonary resuscitation, and basic first aid that will facilitate successful completion of the American National Red Cross Lifeguard Training Certificate, Community First Aid & Safety Certificate, and CPR For The Professional Rescuer Certificate. (CSU/UC)

ES-051**American Red Cross Water Safety Instructors 2 UNITS**

Prerequisite: Successful completion of Exercise Science 043B or equivalent. Students must also have (or obtain as part of the first week of this course) a current Fundamentals of Instructor Training Certificate and be a minimum of 17 years of age.

2.0 hours lecture, 1.0 hours laboratory

Prerequisite: A C grade or higher or Pass in ES 043B or equivalent. Students must also have (or obtain as part of the first week of this course) a current Fundamentals of Instructor Training Certificate and be a minimum of 17 years of age. Successful completion of this class would lead to authorization by the American Red Cross as a Water Safety Instructor. Teaching techniques involved in swimming, community water safety and emergency water safety will be covered. The first week of this course will contain the instruction needed to pass the exam for the required Fundamentals of Instructor Training Certificate (F.I.T.). Students must successfully pass the F.I.T. exam to continue with the remainder of the course. (CSU/UC)

ES-060A**Beginning Badminton 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Presentation of the official singles and doubles games including the six basic strokes, footwork, strategy and etiquette. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-060B**Intermediate Badminton 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 060A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 060A with emphasis on intermediate level skill mastery, strategies and match play in both singles and doubles. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-060C**Advanced Badminton 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 060B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 060B with emphasis on advanced level skill mastery, strategies and match play in both singles and doubles. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-061A**Beginning Pickleball 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This is a beginning pickleball course in which students will develop the basic skills to play the game of pickleball. Instructional focus includes the overhead and underhand groundstrokes, volleys, serves, racket grips, and footwork. Students will learn court diagram and markings, and fundamental strategies and rules used in both singles and doubles play. Fundamental principles of physical fitness and their impact on life-long health and wellness will also be taught.

ES-061B**Intermediate Pickleball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 061A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This is a continuation of ES 061A with an emphasis on instructing the intermediate skills levels of pickleball. Instructional focus includes the overhead, underhand, forehand, and backhand groundstrokes, volleys, drop, cut, and lob serves. Students will learn intermediate strategies and rules used in singles and doubles and cut-throat play. Fundamental principles of physical fitness and their impact on life-long health and wellness will also be taught. (CSU/UC) (AA/AS-E)

ES-061C**Advanced Pickleball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 061B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

This is a continuation of ES 061B with an emphasis on instructing the advanced skills levels of pickleball. Instructional focus includes the overhead, underhand, forehand, and backhand groundstrokes, volleys, drop, cut, lob serves, and overhand smash and drop shots. Students will learn advanced strategies and rules used in singles and doubles and cut-throat play. Fundamental principles of physical fitness and their impact on life-long health and wellness will also be taught. (CSU/UC) (AA/AS-E)

ES-076A**Beginning Tennis****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Introduction to the basic skills and strategies of tennis. Instruction in all primary strokes in both singles and doubles play. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-076B**Intermediate Tennis****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 076A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 076A with emphasis on individual stroke analysis, playing strategy and match play. Instruction in all strokes in both singles and double play. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-076C**Advanced Tennis****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 076B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 076B with emphasis on advanced techniques, strategies and tactics for play in singles, doubles and mixed doubles play. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-125A**Beginning Golf****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in basic golf skills including swing, stance and grip as well as rules and golf course etiquette. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-125B**Intermediate Golf****1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 125A or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

Continuation of ES 125A with emphasis on technique improvement in all basic golf skills. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-125C**Advanced Golf****1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 125B or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

Continuation of ES 125B with emphasis on advanced techniques, strategies and tournament play. Individuals enrolling in this course must furnish their own equipment and pay green fees. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-130A**Beginning Gymnastics****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Beginning gymnastics skills developed and practiced on all the Olympic events for women and men. Emphasis on individual skill acquisition, and performance of gymnastics skills and routines. Topics specific to men's and women's gymnastics will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-130B**Intermediate Gymnastics****1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 130A or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

Intermediate gymnastics skills developed and practiced on all the Olympic events for women and men. Emphasis on individual skill acquisition, improvement and performance of gymnastics skills and routines. Topics specific to men's and women's gymnastics will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-130C**Advanced Gymnastics****1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 130B or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

Advanced gymnastics skills developed and practiced on all the Olympic events for women and men. Emphasis on individual skill acquisition, improvement and performance of gymnastics skills and routines. Topics specific to men's and women's gymnastics will be presented and discussed. Students will also learn the fundamentals of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-155A**Beginning Basketball****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in the basic skills of basketball with emphasis on individual skill development and team play. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-155B**Intermediate Basketball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 155A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 155A with emphasis on intermediate level individual skill development, team play, defensive/offensive tactics and team strategies. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-155C**Advanced Basketball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 155B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 155B with emphasis on advanced level individual skill development and team play, defensive/offensive tactics and team strategies. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-170A**Beginning Soccer****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in the basic skills, rules, and strategies of soccer with emphasis on individual skill development and team play. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-170B**Intermediate Soccer****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 170A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 170A with emphasis on intermediate skills, rules, and strategies of soccer. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-170C**Advanced Soccer****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 170B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 170B with emphasis on advanced skills, rules, and strategies of soccer. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-171A**Beginning Softball****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Instruction in the basic techniques, fundamental skills, history and rules of softball. Emphasis will be placed on beginning level individual and team skills, as well as basic strategy. Students will also learn the fundamentals of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-171B**Intermediate Softball****1 UNITS**

Recommended Preparation: A "C" grade or higher or "Pass" in ES 171A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Instruction in intermediate techniques, skills, and rules as well as basic history of softball. Emphasis will be placed on intermediate level individual and team skills, as well as basic strategy. Students will also learn the fundamentals of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-171C**Advanced Softball****1 UNITS**

Recommended Preparation: A "C" grade or higher or "Pass" in ES 171B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Instruction in advanced techniques, skills and rules as well as basic history of softball. Emphasis will be placed on advanced level individual and team skills, as well as basic and advanced strategies. Students will also learn the fundamentals of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-172A**Beginning Baseball****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Instruction in the basic techniques, fundamental skills, history and rules of baseball. Emphasis will be placed on beginning level individual and team skills, as well as basic strategy. Students will also learn the fundamentals of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-172B**Intermediate Baseball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 172A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Instruction in intermediate techniques, skills, history, and rules of baseball. Emphasis will be placed on intermediate level individual and team skills, as well as strategy. Students will also learn the fundamentals of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-172C**Advanced Baseball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 172B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Instruction in advanced techniques, skills and rules of baseball. Emphasis will be placed on advanced level individual and team skills, as well as strategy. Students will also learn the fundamentals of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-175A**Beginning Volleyball****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in the basic levels of volleyball with emphasis on individual skill development and team play. Topics specific to men's and women's volleyball will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-175B**Intermediate Volleyball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 175A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 175A with emphasis on intermediate level volleyball skills, tactics and strategies. Topics specific to men's and women's volleyball will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-175C**Advanced Volleyball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 175B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 175B with emphasis on advanced level volleyball skills, tactics and strategies. Topics specific to men's and women's volleyball will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-176A**Beginning Beach Volleyball****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course introduces the fundamental skills of Beach Volleyball, including passing, hitting, spiking (attacking), blocking, and serving, as well as beginning concepts of team strategies and tournament play. Topics specific to men's and women's beach volleyball will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-176B**Intermediate Beach Volleyball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 176A or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 176A emphasizing the development of intermediate skills of Beach Volleyball, including passing, hitting, spiking (attacking), cut shots, blocking, and serving, as well as intermediate concepts of team strategies and tournament play. Topics specific to men's and women's beach volleyball will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-176C**Advanced Beach Volleyball****1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 176B or equivalent or specified skill competencies.

1.0 hours lecture, 1.0 hours laboratory

A continuation of ES 176B emphasizing the development of advanced skills of Beach Volleyball, including passing, hitting, spiking (attacking), kills and cut shots, cross-court blocking, and serving, as well as team strategies and tournament play. Topics specific to men's and women's beach volleyball will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-180**Self-Defense for Women****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Basic principles of practical personal protection for women, with emphasis placed on awareness and prevention of situations that may leave a person vulnerable to crime, especially rape. Physical skill acquisition, mental training, and verbal responses will be taught and practiced so students may develop the confidence to stand up and defend themselves. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-185A**Beginning Fencing****1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

Instruction and practice in the basic fundamentals of the French foil including individual skills and bouting, terminology and beginning tactics. Topics specific to fencing will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-185B**Intermediate Fencing****1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 185A or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

Continuation of ES 185A with emphasis on the development of intermediate level proficiency in individual skills and bouting tactics with the French foil. Topics specific to fencing will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-185C**Advanced Fencing****1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 185B or equivalent or specified skill competencies.

1.0 hours lecture, 2.0 hours laboratory

Continuation of ES 185B with emphasis on the development of advanced skills. Strategies and tactics mastery with the French foil in a bouting format. Topics specific to fencing will be presented and discussed. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU/UC) (AA/AS-E)

ES-194**Community Service Learning Experience****1 UNITS**

Community Service Learning Experience (CSLE) is a community outreach program which promotes the national agenda of volunteer engagement. The purpose is to provide students an opportunity to explore options and careers in a selected area of study. This course includes placement in a community based site. (CSU) 5 hours work experience per week, 60 volunteer hours or 75 paid hours.

ES-200**Conditioning and Injury Prevention for Athletics****1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

This class emphasizes physical conditioning, mastery of the basic fundamentals of efficient movement and the skills necessary to reduce the risk of injury associated with intercollegiate athletics. Instruction and practice in conditioning activities, running, and resistance and agility exercises will take place. (CSU/UC)

ES-201**Conditioning and Injury Prevention for Football 1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

This class emphasizes physical conditioning, mastery of the basic fundamentals of efficient movement and skills necessary to reduce the risk of injury associated with intercollegiate football. Instruction and practice in conditioning activities, running and resistance exercises will take place. Emphasis will be placed on conditioning specific to positions played. (CSU/UC)

ES-202**Conditioning and Injury Prevention for Beach Volleyball 1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

This class emphasizes physical conditioning, mastery of the fundamentals of efficient movement and skills necessary to reduce the risk of injury associated with beach volleyball. Instruction and practice in conditioning activities, running, resistance and agility exercises will take place. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness. (CSU, UC)

ES-203**Intercollegiate Baseball 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of baseball. This course includes 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. The course is open to all students who wish to try out for competition at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-204**Advanced Techniques and Strategies of Intercollegiate Baseball 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Advanced techniques, fundamental skills and rules of baseball. Team competition play to increase students' skills. Open to students of advanced skill and primarily designed for those planning to participate in the varsity program or to further one's education in baseball. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-206**Intercollegiate Basketball 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of basketball. This course includes 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. The course is open to all students who wish to try out for competition at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-207**Advanced Techniques and Strategies of Intercollegiate Basketball 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

The instruction and practice in the advanced techniques and strategies of basketball. The course incorporates game experience in which to formulate an understanding by the student of the different styles of play. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-208**Advanced Techniques and Strategies of Intercollegiate Cross Country 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for students with advanced cross country skills and includes instruction and practice in the advanced techniques and strategies of cross country. The course incorporates competitive experiences in which the student will apply different strategies of running. Serves as the Non-Traditional Season (NTS) course for the intercollegiate team. (CSU/UC)

ES-209**Intercollegiate Cross Country 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Open to students who wish to try out in intercollegiate competition in the sport of cross country. This course includes 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. An additional fee for athletics insurance is required upon enrollment. (CSU/UC)

ES-210**Intercollegiate Badminton 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of badminton. This course includes 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. The course is open to all students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-211**Advanced Techniques and Strategies of Intercollegiate Badminton 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for advanced badminton players who are proficient in the fundamental skills and have knowledge of the basic rules of the game. Instruction is geared toward advanced techniques, strategies, and team play in preparation for intercollegiate competition. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-212**Intercollegiate Football 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of football. This course includes 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. The course is open to all students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-214**Advanced Techniques and Strategies of Intercollegiate Offensive and Defensive Football 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

The purpose of this course is to provide training to develop skills and techniques necessary to play various positions in football. These skills are developed by a careful analysis of offensive and defensive techniques practiced in a non-conflict environment. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-215**Intercollegiate Softball****3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of softball. This course includes 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. The course is open to all female students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-216**Advanced Techniques and Strategies of Intercollegiate Softball 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for students with advanced softball skills and includes instruction and practice in the advanced techniques and strategies of softball. The course incorporates competitive experiences in which the students will apply different styles of play. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-218**Intercollegiate Soccer****3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of soccer. This course includes 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. The course is open to all students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-219**Advanced Techniques and Strategies of Intercollegiate Soccer 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for students with advanced soccer skills. Instruction and practice in the advanced techniques and strategies of soccer. The course incorporates game experience in which to formulate an understanding by the student of different styles of play. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-221**Intercollegiate Swimming****3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of swimming. This course includes 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. The course is open to all students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-222**Advanced Techniques and Strategies of Intercollegiate Swimming****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for advanced swimmers who have had previous competitive experience. Emphasis will be placed on conditioning and perfection of the basic fundamentals of strokes and turns in swimming. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-224**Intercollegiate Tennis****3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of tennis. This course includes 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. The course is open to all students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-225**Advanced Techniques and Strategies of Intercollegiate Tennis 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for advanced tennis players who are proficient in the fundamental skills and have knowledge of the basic rules of the game. Instruction is geared toward advanced techniques, strategies, and team play. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-228**Intercollegiate Beach Volleyball****3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of Beach Volleyball. This course includes 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. The course is open to all students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-229**Advanced Techniques and Strategies of Intercollegiate Beach Volleyball****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for advanced beach volleyball players who are proficient in the fundamental skills and have knowledge of the basic rules of the game. Instruction is geared toward advanced techniques, strategies, and team play. Serves as the Non-traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-230**Intercollegiate Volleyball****3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Intercollegiate competition in the sport of volleyball. This course includes 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. The course is open to all students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-231**Advanced Techniques and Strategies of Intercollegiate Volleyball****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for advanced volleyball players who are proficient in the fundamental skills and have knowledge of the basic rules of the game. Instruction is geared toward advanced techniques, strategies, and team play. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-233**Intercollegiate Water Polo****3 UNITS**

Prerequisite: Tryout.

10.0 hours laboratory

Intercollegiate competition in the sport of water polo. This course includes 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. The course is open to all students who wish to try out at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-234**Advanced Techniques and Strategies of Intercollegiate Water Polo****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

This course is designed for the advanced water polo player who has the fundamental swimming, treading, ball handling skills and knowledge of the basic rules of the game. Technical skills, individual team play and team strategies will be covered. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-235**Advanced Techniques and Strategies of Of Intercollegiate Lacrosse****1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

The purpose of this course is to develop advanced techniques, skills, rules, and team competition play to increase students' ability to participate in lacrosse. Open to students of advanced skill and primarily designed for those planning to participate in the intercollegiate team of lacrosse. Serves as the Non-Traditional Season (NTS) preparation course for the intercollegiate team. (CSU/UC)

ES-236**Intercollegiate Lacrosse****3 UNITS**

3.0 hours lecture, 10.0 hours laboratory

Intercollegiate competition in the sport of lacrosse. This course includes 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. The course is open to all students who wish to try out for competition at the intercollegiate level. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-239**Concepts of Intercollegiate Athletic Competition****2 UNITS**

1.0 hours lecture, 4.0 hours laboratory

This course is designed to prepare students for intercollegiate athletic competitions and to maintain athletic conditioning between seasons. It is intended for students who have demonstrated the potential to perform at the intercollegiate athletics level. This course includes instruction in specific sport skills, performance techniques and strategies, daily practice, development of physical fitness, team travel and competition against other collegiate institutions. An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-240**Athletic Competition****3 UNITS**

Prerequisite: Tryout.

10.0 hours laboratory

This course is designed to accommodate any in-season student athlete who, due to a class time conflict, is unable to register for the class section for the student's sport. Though enrolled in this class, each student will, in actuality, meet the objectives and complete the course content for the specific intercollegiate sport course in which the student participates (i.e., baseball, volleyball, etc.). An additional fee for athletic insurance is required upon enrollment. (CSU/UC)

ES-250**Introduction to Kinesiology****3 UNITS**

3.0 hours lecture

This course is an 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. (C-ID KIN 100) (CSU/UC)

ES-253**Physical Education in the Elementary Schools****3 UNITS**

2.5 hours lecture, 1.5 hours laboratory

The statewide program in physical education for the elementary school forms the basis for the course, including the study of child development, personality development, analysis and practice of fundamental skills, selection of activities, organizational materials and the evaluation of teaching ability. (CSU)

ES-255**Care and Prevention of Athletic and Recreational Injuries****3 UNITS**

3.0 hours lecture, 1.0 hours laboratory

Students will be introduced to the concepts and skills needed for interacting with clients, athletes, and patients in a sports medicine setting. The class will address the professional career practices in sports medicine for athletic trainers. The course provides an overview for the prevention, response, care, and management of common recreational, orthopedic, and athletic injuries. Lab activities will include application of concepts, assessment techniques, and skill development such as wrapping and taping. (CSU/UC)

ES-256**Sport and Society****3 UNITS**

3.0 hours lecture

This course explores not only the historical influences in sport, but also examines the role of sport in modern society. Also examined are race, ethnicity, gender and the cultural factors that influence sport and societies across the globe. Connections are drawn between regional, national and global economy in relations to sport. This course also addresses how sport influences and shapes global attitudes among nations, and investigates and discusses the historical, social, economic, and political impact of sport on society. (CSU/UC)

ES-262**Technical Analysis and Theory of Football - Offense****1 UNITS**

Corequisite: ES 212

1.0 hours lecture, 1.0 hours laboratory

This course is designed to allow students interested in pursuing a college level football experience to: (1) develop offensive skills and techniques while acquiring knowledge of the game strategically, (2) analyze drills, formations, techniques of running, passing and receiving for later use in coaching or teaching careers, and (3) receive practical experience through offensive skill and conditioning drills to improve technique, agility and footwork. (CSU/UC)

ES-263**Technical Analysis and Theory of Football - Defense 1 UNITS**

Corequisite: ES 212

1.0 hours lecture, 1.0 hours laboratory

This course is designed to allow students interested in pursuing a college level football experience to: (1) develop defensive skills and techniques while acquiring knowledge of the game strategically, (2) analyze drills, formations, techniques of pass coverage, tackling and blocking for later use in coaching or teaching careers, and (3) receive practical experience through defensive skill and conditioning drills to improve technique, agility and footwork. (CSU/UC)

ES-264**Analysis and Theory of Intercollegiate Sport 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Students will analyze intercollegiate level theories, techniques, and strategies involved with performance of intercollegiate sports. Students will engage in video and digital analysis, data and statistical analysis, skill and performance evaluation, and a deeper understanding of sports related philosophies. (CSU)

ES-290**Teaching Techniques and Methods in Exercise Science 1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

This course provides fundamental hands-on training to students preparing for study in kinesiology or other related fields. This interactive course will provide supervised practical experiences assisting and teaching students in exercise science courses, as well as instruction to aid students with chronic diseases, injuries and physical limitations. Students will work under the direct supervision of an exercise science instructor. (CSU)

ES-291**Anatomy and Kinesiology for Fitness Specialists 3 UNITS**

Corequisite: ES 292.

3.0 hours lecture

This course combines anatomy and kinesiology, addressing the structure of the musculoskeletal system of the human body. Students will study practical applications of muscle groups and their functional relationships to simple mechanical principles. Anatomical and mechanical analysis of motion as it pertains to human movement in exercise will be emphasized. (CSU)

ES-292**Exercise Physiology for Fitness Specialists 3 UNITS**

Corequisite: ES 291.

3.0 hours lecture

This course is a study of human physiological responses, both short and long term, to physical activity and training. Students will examine the effects of exercise and the adaptation to training on the skeletal muscles, nervous system, cardiovascular and respiratory systems, body composition, and fatigue. (CSU)

ES-293**Strength Trainer/Fitness Assessments for Fitness Specialists 2.5 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ES 291 and 292 or equivalent.

Corequisite: ES 294.

2.0 hours lecture, 1.5 hours laboratory

This course covers the mechanics of fitness training, including strength, endurance, and flexibility as well as provides students the necessary knowledge base to select appropriate fitness assessments. Discussion regarding training techniques, optimal workout environments, safety, contraindications, equipment and existing certification programs will help prepare students to work in the fitness industry. Students will evaluate existing standardized assessment batteries for cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, body composition, blood pressure, and cholesterol. (CSU)

ES-294**Exercise Program Design and Special Populations 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ES 291 and 292 or equivalent.

Corequisite: ES 293.

3.0 hours lecture

This course addresses the topics of personal training and group exercise leadership in general program design as well as working with special populations. Information focuses on knowledge and skills (behaviors) associated with leading others to become more physically educated and healthy. Students will develop skills related to planning, informing (lecturing and demonstrating), managing learners and the environment, and assessing instructional processes and outcomes. In addition to general leadership development, information regarding exercise and special populations related to cardiac conditions, physical disabilities, diabetes, sensory impairment, seniors, mentally impaired, pregnancy, and infectious diseases will be emphasized. (CSU)

ES-296**Internship Seminar for Fitness Specialists 0.5 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ES 255 and ES 294 and HED 158 or equivalent.

Corequisite: ES 297.

0.5 hours lecture

This course is designed for the student in the Fitness Training Professional certificate program. Students will discuss current issues in the fitness field, insurance, liability, standard business practices, and national certifications. Students apply knowledge of basic anatomy, exercise physiology, kinesiology, personal information gathering, and exercise testing through enrollment in ES 297. (CSU)

ES-297**Internship for Fitness Specialists 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ES 255 and ES 294 and HED 158 or equivalent.

A work experience course that provides the student with an opportunity to apply and expand upon acquired skills in a selected fitness industry. Students will gain experience in the field of personal training, group exercise leadership, or other fitness specialties. This course will provide pertinent instruction in fitness testing, program and training development, wellness and health education, and management and administration of health and wellness facilities. Periodic review sessions will be held to access the students' progress. (CSU) 5 hours work experience per week, 60 volunteer hours or 75 paid hours.