

SPORT AND EXERCISE STUDIES (SES)

SES-1001 Introduction to Sport and Exercise Studies 2 Credits

An overview of the field of exercise science and the Sport and Exercise Studies program at Cuyahoga Community College. Objectives include describing various aspects of careers, identifying professional resources and organizations, and determining opportunities for advanced study in sport and exercise studies. Requires observation and assignments outside of the classroom.

Lecture: 2 hours

Prerequisite(s): None.

OAN Approved: Career Technical Assurance Guide CTES001.

SES-1040 Teaching Exercise Training Techniques 3 Credits

Instruction on how to teach basic principles, concepts, and techniques of exercise. Components include cardiovascular, resistance, functional and flexibility exercises and activities with proper instructional exercise techniques, guidelines, safety, injury prevention, and basic exercise programming. Practice teaching exercise techniques to classmates, PE or recreation classes, or other out of class experiences may be required.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): PE-1000 Personal Fitness or concurrent enrollment; or PE-1010 Personal Strength Development or concurrent enrollment; or PE-1020 Weight Training or concurrent enrollment; or departmental approval

SES-1300 Fitness and Wellness Coaching 3 Credits

Concepts of fitness and wellness coaching including health behavior change theories, client assessment, goal setting, evaluation processes, coaching dialogue, and coaching ethics as it relates to being a Fitness Specialist. Students will learn how to develop a coaching approach.

Lecture: 3 hours

Prerequisite(s): SES-1040 Teaching Exercise Technique or departmental approval.

SES-1820 Independent Study/Research in Sports and Exercise Studies 1-3 Credits

Directed individual study. Study/research and specific content arranged between instructor and student (see Credit Schedule of classes for current offerings). May be repeated for a maximum of six credits of different topics.

Lecture: 1-3 hours

Prerequisite(s): Departmental approval, and instructor approval, and ENG-0995 Applied College Literacies, or appropriate score on English Placement Test. Note: ENG-0990 Language Fundamentals II taken prior to Fall 2021 will also meet prerequisite requirements.

SES-2000 Essentials of Sports Injury Care 3 Credits

Designed to provide entry level knowledge in the field of sport and fitness related injuries. This course includes basic anatomy of common injuries, evaluation techniques, preventive measures to reduce the incidences of injuries and knowledge of basic treatment procedures. Legal and ethical issues will also be discussed.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): HLTH-1320 CPR-AED for Healthcare Providers or concurrent enrollment, or HLTH-1230 Standard First Aid and Personal Safety, or concurrent enrollment, or departmental approval.

SES-2010 Exercise and Movement Anatomy 3 Credits

Designed for movement and fitness professionals. Examines the anatomical structures, skeletal, muscular, nervous, and fascial systems, joint actions, and kinetic chains of human movement related to exercise, sport, recreation and dance.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): SES-1040 Teaching Exercise Training Techniques, or concurrent enrollment, or departmental approval.

SES-2100 Sport and Exercise Physiology 3 Credits

Designed to increase student's knowledge and understanding about human physiology and the adaptations that occur during exercise. Topics include energy metabolism, cardiovascular, respiratory, endocrine, neuromuscular, nutrition, environmental factors, and applied exercise physiology. The laboratory is designed to complement the lecture area.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): SES-2310 Advanced Training Concepts and Techniques or departmental approval.

SES-2130 Kinesiology: Fundamentals of Human Movement 3 Credits

The scientific study of human movement based on the neuromuscular, fascial and skeletal systems and the principles of physiology and mechanics as it relates to movement in exercise, recreation, sport and dance.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): BIO-2331 Anatomy and Physiology I or SES-2010 Exercise and Movement Anatomy or departmental approval.

SES-2300 Personal Training Certification Preparation 3 Credits

Introductory course in personal training. Covers basic exercise science, fitness evaluation and consultation, exercise techniques, program design, clients with unique needs, safety and legal issues, and business management for personal trainers. Prepares students to take national certification on examinations for personal training.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): SES-1040 Teaching Exercise Training Techniques, or departmental approval.

SES-2310 Advanced Training Concepts and Techniques
3 Credits

Advanced concepts and principles in strength, conditioning and sport performance. Learn and understand the anatomy, biomechanics, sport metabolism, performance assessments, training methods, program design, and proper instructional and lifting techniques of strength, power, speed, agility and conditioning exercises for practical application with athletes.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): SES-1040 Teaching Exercise Training Techniques or departmental approval.

SES-2320 Group Fitness Instructor Certification Preparation
3 Credits

Designed for the individual who is interested in becoming a group fitness/exercise instructor. Focus is on developing instructional techniques such as cueing, choreography, and how to safely modify classes to meet the needs of both healthy individuals and special populations for all formats of group exercise classes.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): SES-1040 Teaching Exercise Training Techniques, or departmental approval.

SES-2330 Motor Learning and Development
3 Credits

Covers the field of physical growth and motor behavior across the lifespan and employs multiple theories to help understand the multicausal and complex nature of motor development. Students examine and understand how interactions of the developing and maturing individual, the environment, and the task being performed bring about changes in a person's movements.

Lecture: 3 hours

Prerequisite(s): SES-1040 Teaching Exercise Training Techniques, or departmental approval.

SES-2350 Exercise for Special Populations
3 Credits

An overview of procedures, concepts, and modifications related to fitness testing and exercise programming for various life stages and chronic diseases. Benefits of exercise and public health implications for each condition will be addressed.

Lecture: 3 hours

Prerequisite(s): SES-1040 Teaching Exercise training Techniques, or concurrent enrollment; or departmental approval.

SES-2360 Fitness and Sport Management
3 Credits

Introduces the health and fitness professional to fitness and sport management. Topics include market and industry analysis, budget, finance, membership, sales, marketing, risk management, liability, and operation of a fitness or sport business. Students will conduct a professional interview and learn how to develop a personal business plan related to fitness, sport, or recreation.

Lecture: 3 hours

Prerequisite(s): SES-1040 Teaching Exercise Training Techniques, or departmental approval.

SES-2380 Corrective Exercise Training
3 Credits

Introduces the health and fitness professional to corrective exercise training. Includes topics of human movement science, human movement impairments, assessments for human movement dysfunction and program design. Students will learn corrective exercise techniques and a training system that uses corrective exercise strategies to help improve muscle imbalances, movement capabilities, and help decrease the risk of injury.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): SES-1040 Teaching Exercise Training Techniques, or departmental approval.

SES-2390 Strength Coach Certification Prep
3 Credits

This course is designed for students who want to prepare for certification as a Strength Coach through the National Council on Strength and Fitness. Students will gain knowledge on key aspects of the certification exam including performance assessment and evaluation, biomechanics, sport metabolism, nutrition and ergogenic aids, training techniques for athletic performance, advanced programming for sport, injury prevention, and return to competition.

Lecture: 3 hours

Prerequisite(s): SES-2310-Advance Training Concepts and Techniques or concurrent enrollment, or departmental approval.

SES-2410 Exercise Testing and Prescription
3 Credits

This course is designed to provide the student with foundational concepts and principles in exercise testing and prescription. Through lecture, lab and practical application, students will learn how to conduct pre-exercise screenings, fitness assessments, interpret results, and design and implement exercise programs for the healthy, adult population.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): SES-2310 Advanced Training Concepts and Techniques or concurrent enrollment; or departmental approval.

SES-2420 Advanced Exercise Testing and Prescription
3 Credits

An integrative lecture/lab course designed to provide advanced principles and concepts regarding health screenings, assessments, exercise testing and exercise prescription. Students will learn advanced program design for healthy adults as well as considerations and modifications for clients with obesity, chronic disease, musculoskeletal issues, and clients across the lifespan. This course will provide students the opportunity to gain experience designing workouts, exercise programs, and periodization plans and teach in-person and in a virtual environment using various technology.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): SES-2410 Exercise Testing and Prescription; or departmental approval.

SES-2500 Health and Wellness Coach Certification Prep**3 Credits**

Concepts of fitness and wellness coaching including health behavior change theories, client assessment, goal setting, evaluation processes, coaching dialogue, and coaching ethics. Students will learn how to develop a coaching approach. Coaching sessions required in class and out of class. Upon successful completion of the NBC-HWC requirements, students will be eligible to sit for the National Board Health and Wellness Coach Certification.

Lecture: 2 hours. Laboratory: 3 hours

Prerequisite(s): SES-1040 Teaching and Exercise Training Techniques, or departmental approval.

SES-2820 Independent Advanced Study/Research in Sports and Exercise Studies**1-3 Credits**

Directed individual advanced study. Study/research title and specific content arranged between instructor and student (see Credit Schedule of classes for current offerings). May be repeated for a maximum of six credits of different topics.

Lecture: 1-3 hours

Prerequisite(s): Departmental approval, and instructor approval, and ENG-0995 Applied College Literacies, or appropriate score on English Placement Test. Note: ENG-0990 Language Fundamentals II taken prior to Fall 2021 will also meet prerequisite requirements.

SES-2840 Practicum: Sport and Exercise Studies**2 Credits**

Capstone Course: Apply practical skills by working in the field of health, wellness, and fitness through practicum experience on campus or off site experiences. Health, wellness and fitness assessment, program design, program evaluation, and daily operation of a fitness facility. Includes topics relevant to case studies, exercise programming, legal and safety concerns, continuing education and certification opportunities, job search, and resume building. Completion and submission of professional Program Portfolio.

Other Required Hours: Practicum: 8 hours a week for 15 weeks; Seminar 1 hour a week. Note: Listed lecture hour reflects contact time for required seminar.

Prerequisite(s): SES-2130 Kinesiology: Fundamentals of Human Movement or concurrent enrollment; and SES-2420 Advanced Exercise Prescription and Program Design or concurrent enrollment; or departmental approval.