

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. Students will learn to instruct cardiovascular, resistance, functional and flexibility exercises and activities. Includes proper instructional exercise techniques, guidelines, safety, injury prevention, and basic exercise programming. Students will assist in teaching exercise techniques to PE and/or recreation classes. Outside class assignments 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-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-1310 Cardiopulmonary Resuscitation or EMT-1310 Cardiopulmonary Resuscitation 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, joint actions, and the neuromyofascial and musculoskeletal system 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

Provides students with an opportunity to develop an in-depth understanding of the advanced principles and concepts of functional, resistance, sports performance, cardiorespiratory and flexibility exercises and training/conditioning programs. Students will learn safe and proper instructional techniques and teaching methodologies using a variety of equipment. Outside class assignments may be required.

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

Provide students with an understanding of the changes that occur in motor learning and development over the entire lifespan. Participants will have opportunities to observe and analyze fundamental motor patterns as they are performed in various settings.

Lecture: 3 hours

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

SES-2340 Analysis of Motor Skills
3 Credits

Introduction to the fundamentals of biomechanics related to human movement and the science of motor skill diagnosis.

Lecture: 2 hours. Laboratory: 2 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 facility. 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-2370 Sport Performance and Strength Conditioning
3 Credits

Designed for health and fitness professionals who are interested in sport performance and strength conditioning for athletes. Topics include sport biomechanics, sport nutrition and metabolism, sport analysis, injury prevention, periodization, sport-specific training and programming. Students will gain practical experience in performance-related fitness assessments, performance-related exercises and training techniques, and program development. Prepares students for the NCSF Certified Strength Coach exam.

Lecture: 2 hours. Laboratory: 2 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-2400 Concepts of Sports Coaching
3 Credits

Theories and principles for coaching sports and sport skills. Emphasis on the development of a coaching philosophy, coaching ethics and the impact of contemporary trends and issues on coaching, and skills common to all coaching activities.

Lecture: 3 hours

Prerequisite(s): SES-1040 Teaching Exercise Training Techniques, 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

Through lecture, lab and practical application, students will learn the principles and concepts of advanced exercise testing and prescription for the healthy adult population and exercise testing, exercise guidelines and exercise program design for weight management, low back care, balance, the older adult, children, adolescents and other special populations.

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 completion of this course students will be eligible to sit for the National Board Health and Wellness Coach Certification.

Lecture: 2 hours. Laboratory: 2 hours

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

SES-2812 Special Topics: 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 completion of this course students will be eligible to sit for the National Board Health and Wellness Coach Certification.

Lecture: 2 hours. Laboratory: 2 hours

Prerequisite(s): 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.

Lecture: 1 hour

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.