# **Exercise and Sport Science (ESS) - Courses**

# Courses

ESS 100 Cr.1

# **Physical Activities**

A program of instruction to enhance participation in physical activities throughout one's lifetime. The primary emphases for specific activities may include acquiring a knowledge base, learning new skills and/ or refining skills, developing components of health-related fitness, enhancing affective skills. Repeatable for credit. Pass/Fail grading. Offered Fall, Spring.

# ESS 104 Cr.2

# **Dance Appreciation**

This course attempts to develop an awareness and appreciation of the role of dance in human society through the study of its purposes, functions and various forms. Offered Fall, Spring.

#### ESS 110 Cr.2

# **Introduction to Sport Management**

This course exposes students to the profession of sport management. The course provides a broad overview of the sport industry, covers fundamental knowledge and skill sets of the sport manager, and provides students with information on specific sport industry segments for potential employment and career choices. Offered Fall, Spring.

# ESS 113 Cr.1

#### **Basic Swimming**

This course is open to exercise and sport science majors and minors only. Emphasis is placed on the improvement of the individual student's swimming skill. Course content ranges from the non-swimmer level through American Red Cross intermediate skill level. Physical education teaching majors and minors are required to enroll in ESS 113 unless they hold one of the following American Red Cross certifications: Water Safety Instructor or Lifeguard Training. Offered Occasionally.

#### ESS 115 Cr.2

# Orientation to Exercise and Sport Science

This course is designed to introduce the exercise and sport science major, to introduce the profession of exercise and sport science, and to give insight into the many diverse careers that can result from studying the discipline. Background knowledge of the foundations of the profession and the selection of a career path that reflects personal interests and abilities will be the focus. Offered Fall, Spring.

# ESS 116 Cr.2

# **Water Safety Instruction**

This course is designed to cover the basic components for certification by the American Red Cross (ARC) or YSL (YMCA Youth Swim Lessons) including infant and preschool, Longfellow's Whale Tales (ARC), progressive instruction, safety training for swim coaches and basic and emergency water safety. Upon successful completion of this course the student will be certified to instruct aquatics by the American Red Cross or YSL. Offered Fall, Spring.

# ESS 118 Cr.2

# Foundations of Physical and School Health Education

This course introduces foundational concepts of physical and school health education, including national standards and models for implementation. Students learn to recognize the roles and responsibilities of physical and health educators in K-12 schools. Offered Fall, Spring.

#### ESS 121 Cr.2

# **Teaching Adventure Education in Physical Education**

This content course is focused on movement skills and knowledge for students in grades K-12 within activity categories aligned to Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for K-12 Physical Education. Teacher candidates develop common and specialized content knowledge related to adventure education and have opportunities to plan and teach peers and K-12 learners. In addition, teacher candidates learn to recognize and understand academic language and theory related to teaching and learning adventure education. Offered Fall, Spring.

#### ESS 130 Cr.1

#### Officiating Athletics

Provides a general background of the rules, interpretations and mechanics of officiating athletic events at various levels of competition. Knowledge in this area may lead to WIAA certification in the following sports: basketball, baseball, football, gymnastics, swimming, track and field, volleyball, and wrestling. Repeatable for credit - maximum eight. Lab 2. Offered Occasionally.

# ESS 144 Cr.2

# **Ethics and Leadership in Sport**

Exploration of the current ethical issues in contemporary sport. This course utilizes current sport events to analyze the ethical implications of decisions made by athletes, coaches, sport managers, and sport organizations during points of crisis or critique. Building upon this ethical foundation, current trends in organizational sport leadership are introduced to develop a more sophisticated understanding of workplace dynamics. Course content includes, but not limited to topics such as cheating and gamesmanship, doping, sport and education, college sport, paying college athletes, youth sport, sportsmanship, concussions, gambling and sport betting, violence in sport, multinational sport organizations and global sport institutions. Offered Fall, Spring.

# ESS 200 Cr.2

# Introduction to Teaching Methods in Physical and School Health Education

This is an introductory course in the methodology of teaching in physical and health education. This course focuses on the methods of planning instruction for student learning, including alignment of objectives, assessment, and tasks. Utilizing the Society of Health and Physical Education (SHAPE) National Health Education and Physical Education Standards and Grade Level Outcomes, teacher candidates begin creating developmentally appropriate lesson plans. Wisconsin Teacher Standards (WTS) and Appropriate Instructional Practice Guidelines are introduced. Prerequisite: ESS 118. Offered Fall, Spring.

# ESS 201 Cr.1

# Safety, First Aid and CPR

Instruction and practice in proper first aid principles, procedures and emergency care including CPR training. American National Red Cross Standard First Aid certification and CPR certification will be awarded to those students who meet certification requirements. One lecture/lab for seven weeks. Offered Fall, Spring.

#### ESS 205 Cr.3

# Human Anatomy and Physiology for Exercise Science I

This course is designed to cover the structure and function of the cellular, histological, muscular, nervous, skeletal systems, as well as the brain and spinal cord. Emphasis will be placed on the musculoskeletal system during the laboratory component. Lect. 2, Lab 2. Prerequisite: BIO 100 or BIO 105 or MIC 100. (Not open for credit to students who have credit in BIO 312.) Offered Fall, Spring.

#### ESS 206 Cr.3

# **Human Anatomy and Physiology for Exercise Science II**

This course is designed to cover the maintenance of homeostasis through study of the structure and function of the autonomic nervous system, cardiovascular, respiratory, immune, digestive, endocrine, and renal systems. Metabolism will also be discussed. It will also cover metabolism and fluid/electrolyte balance. Prerequisite: ESS 205. (Not open for credit for students who have had BIO 313.) Offered Fall, Spring.

#### ESS 207 Cr.3

# **Human Motor Behavior**

This course is an investigation into the nature of human motor development, motor control, and motor learning. Topics will be approached from a constraints perspective, focusing on the interaction among the individual, the environment, and the task. Lect. 2, Lab 2. Offered Fall, Spring.

# ESS 209 Cr.2

# Strength Training Clinical I

A course designed to provide practical experience in the supervision of a strength center. Students will have the opportunity to instruct proper lifting technique, assist with the assessment of strength, power and speed, and learn facility and equipment maintenance. Lab 4. Prerequisite: ESS 205 or ESS 206 or concurrent enrollment; admission to strength and conditioning concentration. Pass/Fail grading. Offered Fall, Spring.

# ESS 212 Cr.3

# Teaching Fundamental Movement Skills in Physical Education

This is a content course focused on the development of fundamental movement skills and knowledge for students in grades K-5 that are aligned to Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for K-12 Physical Education. Teacher candidates develop common and specialized content knowledge related to the development of fundamental movement skills, movement concepts, and gymnastics. In addition, teacher candidates learn to recognize and understand academic language and theory related to teaching and learning fundamental movements, educational games, and dance. Students have opportunities to plan, observe, and teach peers and K-12 learners. Lect. 2, Lab 2. Prerequisite: ESS 118 or concurrent enrollment. Offered Fall, Spring.

# ESS 230 Cr.3

#### Functional Health Knowledge for School Health Education

In this course, students learn aspects of the functional health knowledge required to teach skills-based school health education to K-12 students. Functional health knowledge includes the core concepts (National Health Education Standard 1) in health: nutrition/healthy eating, mental and emotional health, alcohol and other drugs, tobacco, violence, safety/injury prevention, personal wellness, and sexual health. Prerequisite: ESS 118. Offered Fall, Spring.

#### ESS 231 Cr.3

# Introduction to Teaching Adapted Physical Education

This is a pedagogy designed to introduce teacher candidates to the process of teaching physical education to K-12 students with disabilities. Course content includes: (1) federal and state laws pertaining to the education of K-12 students with disabilities; (2) special education service delivery process, including referral and placement of students in the least restrictive environment; (3) appropriate physical education teaching methods for students with disabilities to use in the K-12 instructional setting; (4) causes and characteristics of selected disabilities and how these disabilities impact a person's movement and learning potential; and (5) adapted teaching techniques and equipment for motor development, physical fitness, sport skills, and aquatics. In addition, all students are required to participate in the UW-La Crosse Motor Development Program. Lect. 2, Lab 2. Prerequisite: ESS 118 or concurrent enrollment. Offered Fall, Spring.

#### ESS 232 Cr.2

# **Adapted Lifetime Recreation and Sport**

This course includes teaching within an adapted aquatics program and adapted sports league. This course focuses on how physical activities are beneficial and can be used as a lifetime recreation activity for persons with disabilities. Teacher candidates learn how to create, implement, and apply teaching strategies in the K-12 adapted aquatics setting. Teacher candidates also offer assistance during the adapted sports league (ASL) in local schools and identify additional lifetime recreation opportunities within the community for persons with disabilities. Lect. 1, Lab 2. Prerequisite: ESS 231. Offered Fall, Spring.

#### ESS 233 Cr.2

# **Teaching Methods in Adapted Aquatics**

This course focuses on strategies and techniques for teaching aquatic skills to persons with disabilities including those with moderate to severe conditions. Developmental progressions and instructional strategies for aquatic skills are presented. Modified and adapted equipment will be introduced for instructional purposes. A range of content from basic water adjustment skills through the use of aquatics for fitness and lifetime physical activity will be covered. Lect. 1, Lab 3. Prerequisite: ESS 231. Offered Fall.

# ESS 261 Cr.2

# **Teaching Educational Gymnastics in Physical Education**

A content course focused on movement skills and knowledge for students in grades PK-6 within activity categories aligned to National Standards and Grade Level Outcomes for K-12 Physical Education. Teacher candidates will develop common and specialized content knowledge related to educational gymnastics; will have opportunities to plan and teach; will learn about physical activity and fitness knowledge related to educational gymnastics. In addition, teacher candidates will recognize and understand academic language and theory related to teaching and learning educational gymnastics. Lect. 1, Lab 1. Prerequisite: ESS 200. Offered Fall, Spring.

#### ESS 281 Cr.2

# **Prevention and Care of Athletic Injuries**

This course gives students who are interested in inter-scholastic athletics part of the necessary background to become a qualified coach or director. This course includes common injuries occurring as a result of participating in athletics and physical education activities; procedures and techniques in the prevention and care of injuries; and the understanding of the coaches' and teachers' roles in the care of injuries. Prerequisite: ESS 201; and ESS 205 or BIO 312. Offered Fall, Spring.

#### ESS 300 Cr.2

# Assessment in Physical and School Health Education

This is an introductory course in the methodology of teaching effectiveness in physical and school health education through a socialization lens. This course focuses on the intentional alignment of assessment in the teaching-learning process (planning, instruction, assessment). This course utilizes the Society of Health and Physical Education (SHAPE) National Physical and Health Education Standards and Grade Level Outcomes. Teacher candidates begin creating developmentally appropriate assessments in alignment within lesson plans, while also comprehending and implementing assessments in a variety of ways. In addition, terminology such as formative, summative, informal, formal, assessment for learning, assessment of learning, traditional assessments, performance-based assessments, rubrics, and grading practices are analyzed and discussed. Wisconsin Teacher Standards (WTS) and Appropriate Instructional Practice Guidelines are introduced. Prerequisite: admission to physical, adapted, and school health education. Offered Fall, Spring.

#### ESS 302 Cr.3

# **Physiology of Exercise**

Applied physiology: a study of how normal physiological function (homeostasis) is altered, and subsequently restored, in response to various forms of stress (exercise and training). Lect. 2, Lab 2. Prerequisite: grade of "C" or better in ESS 206 or BIO 313. Offered Fall, Spring.

# ESS 303 Cr.3

#### **Biomechanics**

Biomechanics emphasizes the investigation and application of mechanical principles to the study of human motion and the motion of sport objects. Students will learn systematic approaches for the qualitative and quantitative analysis of the human body as it engages in motor activities. Lect. 2, Lab 2. Prerequisite: grade of "C" or better in ESS 205 or BIO 312. Recommended: MTH 150, MTH 151, or MTH 207. Offered Fall, Spring.

# ESS 304 Cr.2

# Biomechanical Principles of Human Movement Assessment and Analysis for Educators

This course emphasizes the investigation and application of anatomical structure and mechanical principles to the study of human movement and the motion of sport objects. Students will learn systematic approaches for the qualitative analysis of the human body as it engages in motor activities. Prerequisite: ESS 200; grade of "C" or better in ESS 205 or BIO 312. Offered Fall, Spring.

# ESS 309 Cr.2

# **Strength & Conditioning Methods**

This course exposes students to theory, applications, and methods pertinent to the field of strength and conditioning. Students will attain competency in various psychomotor skills and the ability to incorporate viable feedback for instructing skills and techniques. Topics include instructional progressions for movement preparation; resistance exercise techniques; strength, power and speed development; and the integration of all training variables toward improving movement efficiency. Students will assist with the implementation of strength and conditioning programs. Lect. 1, Lab 2. Prerequisite: ESS 368. Pass/Fail grading. Offered Fall, Spring.

#### ESS 310 Cr.2

# **Teaching Outdoor Pursuits in Physical Education**

This is a content course focused on how to implement outdoor pursuits for students in grades K-12 aligned to Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for K-12 Physical Education. Teacher candidates develop common and specialized content knowledge related to outdoor pursuits, have opportunities to plan and teach, and learn about physical activity and fitness knowledge specific to each activity category. In addition, teacher candidates learn to recognize and understand academic language and theory related to teaching and learning a variety of outdoor pursuits which may include, but not limited to, recreational boating (kayaking, canoeing, sailing, rowing), hiking, backpacking, fishing, orienteering/ geocaching, ice skating, skateboarding, snow skiing, snowboarding, snowshoeing, bouldering/traversing/climbing, mountain biking, adventure activities, and ropes courses. Lect. 1, Lab 3. Prerequisite: admission to physical, adapted, and school health education. Offered Fall, Spring.

# ESS 317 Cr.2

# **Medical Terminology and Documentation**

This course covers the study of the language of medicine used in clinics, hospitals, and other health agencies. The student develops a working knowledge of terms, word roots, and abbreviations with emphasis on spelling, definitions, and pronunciation. An introduction to health care records, disease process, operative, diagnostic, therapeutic, and symptomatic terminology of body systems are covered as they pertain to health professions. Offered Fall, Winter, Spring, Summer.

# ESS 320 Cr.3

# Field Experience in Sport Management

This course provides a practical experience in a sport management setting. Experiences may include sport event facilitation, budget preparation and monitoring, preparing contracts, checking eligibility, and marketing and promotion. Repeatable for credit - maximum six credits. Prerequisite: admission into exercise sport science major - sport management emphasis. Offered Fall, Winter, Spring, Summer.

# ESS 323 Cr.3

# **Nutrition and Sport**

Basic principles of human nutrition and nutritional needs for athletes and/or active populations. Issues discussed include ergogenic aids, carbohydrate loading/manipulation, eating disorders, and protein supplementation. Practical application will include dietary analysis and composition for people in various activities and conditions. Prerequisite: ESS 302 or NUT 200. Offered Fall, Spring.

# ESS 324 Cr.1-3

# Independent Study in Exercise and Sport Science

Provides students with supervised study in a specific area of interest in their exercise and sport science academic program. Repeatable for credit - maximum nine credits or three courses. Consent of department. Offered Fall, Winter, Spring, Summer.

# ESS 328 Cr.3

# Field Experience in Exercise Science

Practical experience in an exercise science setting or formal observation in a clinical setting. Experiences provided may include activities such as exercise leadership, coaching, assisting with fitness assessment and exercise prescription, exercise research, clinical observation, etc. Repeatable for credit - maximum six. Prerequisite: admission to the exercise sport science major - fitness or pre-professional emphasis. Offered Fall, Winter, Spring, Summer.

#### ESS 330 Cr.2

# Skill Development in School Health Education

This course formally introduces the skill development model for skills-based health education. Students explore the steps of the model and how they apply to the different Society of Health and Physical Education (SHAPE) National Health Education Standards in teaching/developing health-literate individuals. Students use the skill development model to design and implement lessons that connect skills to core concepts/functional health knowledge. This course also includes an introductory teaching lab experience with K-12 learners. Lect. 1, Lab 2. Prerequisite: ESS 230; ESS 361 or ESS 362 taken concurrently; admission to physical, adapted, and school health education. Offered Fall, Spring.

#### ESS 331 Cr.2

#### **Disability and Physical Activity Implications**

This course covers the causes, characteristics, incidences, and impacts of physical, sensory, emotional/behavioral, intellectual, and other developmental disabilities. Content includes a wide variety of low and high incidence disabilities (mild through severe/profound levels for each) and the implications for physical education instruction in K-12 educational settings. Emphasis is on movement and motor development implications, adaptations, and instructional strategies to enhance physical activity and gross motor skills of individuals with disabilities, ages 3 through adulthood. Prerequisite: ESS 231 or RTH 329. Offered Fall.

#### ESS 344 Cr.3

# **Introduction to Fitness Assessment**

The purpose of this course is to review the clinical and diagnostic approach to cardiovascular anatomy, physiology and pathophysiology, and to provide basic knowledge in evaluation, methodology and interpretation of fitness testing. Areas of emphasis will be population characteristics, participant screening and referral process, alternatives of fitness assessment and exercise prescription. Lect. 2, Lab 2. Prerequisite: ESS 302; admission to exercise sports science - fitness emphasis. Offered Fall, Spring.

# ESS 348 Cr.2

# Theory of Coaching

Theory of coaching specific competitive sports. Coaching and directing youth, club, inter-scholastic and intercollegiate sports programs. Theory of coaching the following sports will be offered on a rotational basis: baseball/softball, basketball, football, gymnastics, soccer, swimming and diving, tennis, track and field/cross country, volleyball, and wrestling. A competitive background in and fundamental knowledge of the sport is highly recommended. Repeatable for credit - maximum four. Prerequisite: junior standing. Offered Fall, Spring.

# ESS 349 Cr.2

# **Psychology of Coaching Competitive Athletics**

Aids the prospective coach to better understand the application of psychological concepts to the coaching of sports. Emphasis will be on the methods of improving the performance of athletes through a better understanding of the factors affecting teaching and learning in athletics. Prerequisite: junior standing. Offered Fall, Spring.

#### ESS 355 Cr.3

# Methods of Exercise Leadership

This course will cover the methodology of developing, teaching and leading sound exercise workouts for all levels of physiological fitness and for individual needs. Lect. 2, Lab 2. Prerequisite: ESS 302, ESS 303; admission to exercise sports science - fitness emphasis. Offered Fall, Spring.

#### ESS 361 Cr.1

# Physical Education, School Health Education, and Physical Activity Lab I

This introductory teaching methods course provides the opportunity to construct and implement developmentally appropriate lessons based on Society of Health and Physical Education (SHAPE) National Health and Physical Education Standards and Grade Level Outcomes. This course focuses on learning and implementing classroom management strategies and reflecting on planning and teaching practices within a professional learning community. During this course students teach a variety of ages (4-18) within the La Crosse Area Physical Education, School Health Education, and Physical Activity Program. Lab 3. Prerequisite: ESS 366 taken concurrently; admission to physical, adapted, and school health education. Offered Fall.

#### ESS 362 Cr.1

# Physical Education, School Health Education, and Physical Activity Lab II

This introductory teaching methods course extends the opportunity for students to construct and implement developmentally appropriate lessons based on Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for K-12 Physical Education. Students continue to refine the implementation of classroom management strategies and their ability to reflect on planning and teaching practices within a professional learning community. During this course students teach a variety of ages (4-18) within the La Crosse Area Physical Education, School Health Education, and Physical Activity Program. Lab 3. Prerequisite:ESS 367 taken concurrently; admission to physical, adapted, and school health education. Offered Spring.

# ESS 363 Cr.2

# **Teaching Dance in Physical Education**

This content course is focused on movement skills and knowledge for students in grades 3-12 within activity categories aligned to Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for K-12 Physical Education. Teacher candidates develop common and specialized content knowledge related to teaching dance and rhythmic activities, have opportunities to plan and teach peers and K-12 learners, and learn about physical activity and fitness knowledge specific to each activity category. In addition, teacher candidates learn to recognize and understand academic language and theory related to teaching and learning a variety of dance and rhythmic activities which may include, but not limited to, dance forms such as creative movement, line, ballet, modern, literature and movement, sport, hip hop, Latin, ballroom, square, stepping, folk/cultural dance, and social. Lect. 1, Lab 2. Prerequisite: admission to physical, adapted, and school health education. Offered Fall, Spring.

# ESS 364 Cr.2

# **Teaching Fitness and Wellness in Physical Education**

This content course is focused on movement skills and knowledge for students in grades K-12 aligned to Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for K-12 Physical Education. Teacher candidates develop common and specialized content knowledge related to fitness, wellness, and physical activity. Students have opportunities to plan and teach peers and K-12 learners, learn about physical activity and fitness knowledge specific to improving or maintaining fitness and wellness. In addition, teacher candidates learn to recognize and understand academic language and theory related to teaching and learning fitness activities including, but not limited to, yoga, Pilates, resistance training, spinning, running, fitness walking, fitness swimming, kickboxing, cardio-kick, Zumba, and exergaming. Lect. 1, Lab 2. Prerequisite: admission to physical, adapted, and school health education. Offered Fall, Spring.

#### ESS 366 Cr.2

# Teaching Target, Net and Wall Activities in Physical Education

This content course is focused on movement skills and knowledge for students in grades 3-12 within activity categories aligned to Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for K-12 Physical Education. Teacher candidates develop common and specialized content knowledge related to target and net/wall activity categories, have opportunities to plan and peer teach, and learn about physical activity and fitness knowledge specific to each activity category. In addition, teacher candidates learn to recognize and understand academic language and theory related to teaching and learning target and net/wall activity categories. Lect. 1, Lab 2. Prerequisite: ESS 361 taken concurrently; admission to physical, adapted, and school health education. Offered Fall.

#### ESS 367 Cr.2

# Teaching Invasion and Striking and Fielding Activities in Physical Education

This content course is focused on movement skills and knowledge for students in grades 3-12 within activity categories aligned to Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for K-12 Physical Education. Teacher candidates develop common and specialized content knowledge related to invasion, striking and fielding activities; have opportunities to plan and peer teach; and learn about physical activity and fitness knowledge specific to each activity category. In addition, teacher candidates learn to recognize and understand academic language and theory related to teaching and learning invasion and striking and fielding activity categories. Lect. 1, Lab 2. Prerequisite: ESS 362 taken concurrently; admission to physical, adapted, and school health education. Offered Spring.

#### ESS 368 Cr.3

# **Strength Training Techniques and Programs**

This course is designed to provide the student with a working knowledge of proper lifting and spotting technique, an understanding of the various types of equipment and modes of strength training, basic program design and programming for special populations, and the strategies for instructing resistance exercise techniques. Students will also be taught how to design, and individualize, a strength training program. Lect. 2, Lab 2. Prerequisite: ESS 205 and ESS 206, or BIO 312 and BIO 313. ESS 100 - Strength Training recommended. Offered Fall, Spring.

#### ESS 373 Cr.3

# Media and Public Relations in Sport Management

This course is designed to acquaint students with media and public relations (PR) practices that are incorporated in sport management. Included in the class are the responsibilities and issues that sport managers face on a daily basis such as PR management, crisis management, interviews and media releases, legal and ethical dilemmas, and the production of sport media relations tools. The course emphasizes practical application of sport media and PR. Prerequisite: admission to exercise sports science plan - sport management emphasis. Offered Fall, Spring.

# ESS 383 Cr.3

# **Clinical Pathology for Exercise Science**

This course is designed to introduce students to the pathology of injuries and illnesses of the body systems and treated by allied health professionals. Topics included are categorized into physiological responses to trauma, disease, inflammatory responses and autoimmune/immunodeficiency responses to various diseases/syndromes/conditions. Prerequisite: admission to athletic training major or ESS-exercise science emphasis. Offered Fall, Spring, Summer.

#### ESS 386 Cr.2

# **Athletic Training Clinical III**

A course designed to provide clinical experience in an athletic training setting. Students will have an opportunity to gain competency in lower extremity evaluation skills, and management of pathologies of the lower extremity that are common in athletics. This course is designed to have students demonstrate mastery of a variety of athletic training clinical proficiencies and clinical integration proficiencies. Prerequisite: ESS 287. Offered Fall.

# ESS 387 Cr.2

#### **Athletic Training Clinical IV**

A course designed to provide clinical experience in an athletic training setting. Students will have an opportunity to gain competency in utilization of therapeutic interventions for the management of pathologies that are common in physical activity and healthcare setting. This course is designed to have students demonstrate mastery of a variety of athletic training clinical proficiencies and clinical integration proficiencies. Prerequisite: ESS 386. Offered Spring.

#### ESS 403 Cr.2

# **Advanced Strength Training Applications and Techniques**

This course presents advanced strength training and conditioning theory and practice. Designed primarily for students specializing in strength and conditioning, the course explores advanced periodization models and their utilization, mastery and analysis of Olympic lifts, plyometric programming, ergogenic aids (identification, legal implications, nutritional alternatives,) facility design, and special population needs. Prerequisite: ESS 302, ESS 303, ESS 368. Offered Fall, Spring.

#### ESS 407 Cr.3

#### **Sport Management and Society**

This course is designed to provide a foundation of the social, cultural, and psychological aspects that are represented in U.S. sport culture. Students gain an understanding of how various identities affect the equitable or inequitable distribution of resources, influence, and prestige within particular sports, programs, and/or individuals in athletics, physical education, and fitness. Students learn to identify current structural, ideological, and ethical issues in sport and how to develop potential solutions to inequities. Prerequisite: admission to exercise sport science major - sport management emphasis; junior standing. Offered Fall, Spring.

#### ESS 409 Cr.2

# **Strength Training Clinical III**

A course designed to provide practical experience in management of a strength center. Students will have the opportunity to instruct proper lifting technique, assess strength, power and speed, maintain the strength facility, design lifting and conditioning programs, and assist with the supervision and instruction of junior staff members. Lab 4. Prerequisite: ESS 302, ESS 303, ESS 309, ESS 368. Offered Fall, Spring.

# ESS 410 Cr.2

# **Legal Implications of Sport**

This course addresses the legal aspects for the operation and administration of sport and athletic programs. Prerequisite: admission to exercise sport science major - fitness or sport management emphasis. Offered Fall, Spring.

#### ESS 411 Cr.2

# Strength and Conditioning Educator Training

This course is a capstone experience for students specializing in strength and conditioning. Content includes exercise physiology and biomechanics, nutrition and ergogenic aids, testing and evaluation, exercise techniques, program design, and organization and administration of a strength and conditioning facility. Prerequisite: ESS 403 or concurrent enrollment. Offered Fall, Spring.

#### ESS 418 Cr.4

# **Teaching Methods in School Health Education**

This pedagogy course is focused on the Society of Health and Physical Education (SHAPE) National Health Education Standards, Wisconsin Teacher Standards (WTS), and best practices related to methodology and assessment. This course includes a clinical experience organized as a professional development school (PDS) where teacher candidates spend significant time developing lesson plans, teaching, and assessing student learning, as well as interacting with secondary school students and teachers. A professional learning community approach is utilized throughout the course to provide students multiple opportunities to collaborate. A multi-day, consistent schedule to participate in the field experience classroom is established by the course instructor in consultation with the teacher candidate and cooperating teacher. Prerequisite: ESS 330, ESS 419; ESS 420 taken concurrently; admission to physical, adapted, and school health education. Offered Fall, Spring.

#### ESS 419 Cr.4

Elementary Methods and Field Experience I in Physical Education This pedagogy course is focused on Society of Health and Physical Education (SHAPE) National Standards and Grade Level Outcomes for elementary physical education, Wisconsin Teacher Standards (WTS), and best practices related to methodology and assessment. This course includes a field experience organized as a professional development school (PDS) where teacher candidates spend significant time developing lesson plans, teaching, and assessing student learning, as well as interacting with elementary school students and teachers. A professional learning community approach is utilized throughout the course to provide students multiple opportunities to collaborate. A multiday, consistent schedule to participate in the field experience classroom is established by the course instructor in consultation with the teacher candidate and cooperating teacher. Prerequisite: ESS 300, ESS 361, ESS 362, ESS 363, ESS 366, ESS 367; admission to physical, adapted, and school health education. Offered Fall, Spring.

#### ESS 420 Cr.4

# Secondary Methods and Field Experience II in Physical Education

This pedagogy course is focused on Society of Health and Physical Educators (SHAPE) National Standards and Grade Level Outcomes for secondary physical education, Wisconsin Teacher Standards (WTS), and best practices related to methodology and assessment. This course includes a field experience organized as a professional development school (PDS) where teacher candidates spend significant time developing lesson plans, teaching, and assessing student learning, as well as interacting with secondary school students and teachers. A professional learning community approach is utilized throughout the course to provide students multiple opportunities to collaborate. A multi-day, consistent schedule to participate in the field experience classroom is established by the course instructor in consultation with the teacher candidate and cooperating teacher. Prerequisite: ESS 310, ESS 364, ESS 368, ESS 419; taken concurrent with ESS 418; admission to physical, adapted, and school health education. Offered Fall, Spring.

#### ESS 421 Cr.3

# **Sport Operations and Event Management**

This course is designed to introduce students to principles and procedures for preparing, planning, operating, managing, and evaluating an event in sports settings. Grounded in a practical experience, students engage in all aspects of running a sport event. Students reflect upon their personal experience in the class and examine not only how they work as an individual, but also as part of a larger group. Application of learning is made to various sport levels and organizations. Prerequisite: admission to exercise sport science - sport management emphasis; junior standing. Offered Fall, Spring.

#### ESS 423 Cr.2

# Sociocultural Factors in Physical Education and School Health Education

This is a content course which focuses on contemporary and historical perspectives on sociocultural and philosophical issues that influence teaching and learning in school health and physical education. Students analyze how particular students and student groups are advantaged and disadvantaged in and through social practices in school health, physical education, and physical activity environments. Topics include, but are not limited to, race, ethnicity, gender, sexuality, ability, bodies, socioeconomic status, and culturally responsive teaching. Prerequisite: admission to physical, adapted, and school health education; junior standing. Offered Fall, Spring.

#### ESS 424 Cr.3

# Curriculum Development and Administration in Physical Education and School Health Education

This is a culminating course designed to provide an experience in creating a quality health and physical education program through development of all facets of a standards-based K-12 curriculum. The administrative component includes creating policy and procedures as well as current mandates and initiatives in education. Prerequisite: ESS 419; admission to physical, adapted, and school health education. Offered Fall, Spring.

#### ESS 425 Cr.1

# **Student Teaching Seminar in Physical Education**

This seminar course provides an opportunity to discuss and further develop teacher candidates' critical thinking regarding issues of the field and practice of educating school-age individuals. As a result of this course, teacher candidates will have gained additional understanding of current issues experienced within their student teaching experiences as well as issues around the areas of professionalism, conflict resolution, and classroom management through discussion of practical experiences. Prerequisite: concurrent enrollment in EDS 495; admission to teacher education; passing content competency benchmarks. Pass/Fail grading. Offered Fall, Spring.

#### ESS 431 Cr.1

# Fitness Programming for Persons with Disabilities

Students learn techniques for health-related physical fitness assessment, individualized exercise prescription, and physical activity adaptations. The focus is on hands-on clinical skill development in an evidence-based exercise program for individuals with disabilities. Students should take this course within two semesters after completion of ESS 430. Repeatable for credit - maximum three. Prerequisite: ESS 231. Offered Fall, Spring, Summer.

#### ESS 432 Cr.3

# **Financial Aspects of Sport**

This course is designed to study financial management principles including budget preparation and development, fundraising, and economic impact for use in the administration of sport and athletic programs. In addition, emphasis is placed on sources of revenue and expense for sport organizations and their use in sport management. Students learn why budget and finance in sport are critical components of all sports-related industries. Prerequisite: admission to exercise sport science - sport management emphasis; junior standing. Offered Fall, Spring.

#### ESS 435/535 Cr.1

# Sport for Persons with Disabilities

This course addresses sports that have been modified/adapted based on traditional sports and those developed specifically for persons with disabilities. Content includes the legal aspects and health enhancing benefits for sport participation for persons with disabilities, developmental sport models, disability sport organizations, sport skill development, school and community advocacy and involvement, and interscholastic adapted sport programs. Out of class clinical experience is required in the course. This course is taught largely at a graduate level. Prerequisite: ESS 231; admission into the adapted physical education teaching minor; junior standing. Offered Spring, Summer.

#### ESS 436 Cr.2

# **Assessment in Adapted Physical Education**

This course presents standardized tests and authentic procedures for assessing the gross motor development, motor skill performance, and health-related physical activity/fitness of persons with disabilities. Students learn to select, administer, and interpret assessment instruments and how to use results to develop the physical education components of individualized education programs (IEPs) as the basis for instructional programs. Types of assessment decisions and the K-12 special education eligibility and service delivery process are studied. Prerequisite: ESS 331; admission to physical, adapted, and school health education. Offered Spring.

#### ESS 437 Cr.3

# Teaching and Service Delivery Models in Adapted Physical Education

This course focuses on evidence-based adapted physical education teaching strategies and service delivery models in K-12 settings. Instructional programming and best practices of early childhood, elementary, middle/secondary, and transitional programs for students with disabilities in adapted physical education are covered. Emphasis is on collaboration among professional service providers such as special educators, general physical educators, and related service personnel (e.g., occupational, physical, and recreational therapists), as well other community agency staff. Practical teaching is included, along with guest presentations on related disciplines and programs. Students are required to participate in a teaching lab with K-12 learners. Lect. 2, Lab 2. Prerequisite: ESS 331; admission to physical, adapted, and school health education. Offered Fall.

#### ESS 439 Cr.3

# Teaching and Leadership in Adapted Physical Education

This course provides students with practical teaching and supervision opportunities to enhance their skills in planning, implementing, and evaluating adapted physical education programs for children and youth with disabilities. Special education service delivery process is reviewed and implemented. Emphasis is also placed on effective staff collaboration and consultation as well as teacher and program supervision. In addition, all students are required to participate in the UW-La Crosse Motor Development Program. Lect. 2, Lab 2. Prerequisite: ESS 436; admission to physical, adapted, and school health education. Offered Fall, Spring.

# ESS 440/540 Cr.3

# **Advanced Sport Nutrition**

This course is designed to provide the student with a working knowledge of advanced topics as they relate to the field of sport nutrition. Such topics will include nutritional biochemistry, ergogenic aids, nutritional strategies for strength/power athletes, endurance athletes and altering body composition. Students will also learn how to assess an individual's dietary intake and utilize technology to determine energy needs of athletes. This course is taught largely at an undergraduate level. Graduate students will have additional course requirements/ expectations. Prerequisite: ESS 302, ESS 323. Offered Summer, Winter.

#### ESS 443 Cr.3

# **Fitness Across the Lifespan**

This course will explore why and how physical activity must change to meet the modifications that occur in the human body as it matures from childhood to older adulthood. Students will address the principles and procedures for designing physical fitness experiences for all ages. Lecture, practice, and field experiences are included. Prerequisite: ESS 302; ESS 303; admission to exercise sports science - exercise science emphasis or a declared emphasis in gerontology. Offered Fall, Spring.

#### ESS 444 Cr.3

# **Revenue Generation in Sport**

This course provides a foundation for sales and revenue generation in sport. This course prepares students for the sport business workforce via the sales outlet with emphasis placed on students developing skills necessary for success in sport sales. Prerequisite: admission to exercise sports science - sport management emphasis; junior standing. Offered Fall, Spring.

# ESS 445/545 Cr.3

# Planning Facilities for Physical Activity and Sport

This course introduces students to the planning, design, development, and management for schools, athletic clubs, fitness centers, professional organizations, and other sport entities. This course is taught largely at an undergraduate level. Graduate students have additional course requirements/expectations. Prerequisite: admission to exercise sport science - sport management emphasis; junior standing. Offered Fall, Spring.

#### ESS 446 Cr.3

#### **Current Research and Trends in Exercise Science**

This lecture/discussion-based course is designed to thoroughly review and analyze the relevant and current research/industrial trends within exercise and sport science. Significant emphasis is given toward the student learning how to present, critique, and defend research from a scientific perspective. Selected topics include content that is relevant to both students seeking to attain jobs in the research field or further education within the fitness realm and pre-professional careers. Students are encouraged to take this course near the end of their careers as undergraduate students in the exercise sports science major-exercise science fitness or pre-professional emphases. Prerequisite: admission to exercise sports science major - exercise science fitness or pre-professional track. Offered Fall, Spring.

# ESS 447 Cr.3

# **Administration in Fitness and Sport**

This course covers principles of administrative theory and practice in the fitness and sport industry, including general administrative functions, public relations, personnel, budget and finance, facility management, and evaluation techniques. Prerequisite: admission to exercise sports science major - fitness or sport management emphasis. Offered Fall, Spring.

# ESS 448 Cr.3

# **Promotion and Development of Fitness and Sport Programs**

This course provides an understanding of the sport product and the application of the principles of promotion and marketing in the sport and fitness industry. Primary focus is on utilizing marketing theories and foundational principles to aid sport organizations. Prerequisite: MKT 309; admission to exercise sport science major - fitness or sport management emphasis. Offered Fall, Spring.

#### ESS 449 Cr.1

# Seminar in Fitness/Sports Management

An in-depth orientation to the required senior internship experience. Required course to be taken one semester prior to internship. Prerequisite: GPA of 2.75 (cumulative and major); admission to the exercise sports science major - fitness or sport management emphasis; senior standing. Offered Fall, Spring.

# ESS 450 Cr.8-12

# **Exercise and Sport Science Internship**

The internship is designed to be a terminal experience for students majoring in fitness or sport management (12 credits) emphases with an intensive supervised practical work experience. Prerequisite: fitness and sport management majors: all course work for the appropriate major must be completed and a minimum cumulative and major GPA of 2.75. Pass/Fail grading. Offered Fall, Spring, Summer.

# ESS 451 Cr.2-3

# **Practicum in Athletic Coaching**

The practicum in athletic coaching is designed to be a culminating experience for students completing the concentration in Coaching Competitive Athletics. Students will seek a placement with a department approved university or public/private school athletic team to obtain practical coaching experience in the sport(s) of their choice. The practicum experience will be supervised by a coach or athletic director of the assigned team and the director of the concentration in coaching competitive athletics. Repeatable for credit in different sport(s) - maximum six. Prerequisite: completion of requirements in coaching concentration with the exception of ESS 368 and elective credits. Pass/Fail grading. Offered Fall, Spring.

#### ESS 460/560 Cr.1-3

#### **Exercise Science Clinical Forum**

Visiting lecturers as well as university professors will address various topics related to exercise science. This course is taught largely at an undergraduate level. Graduate students will have additional course requirements/expectations. Repeatable for credit. Prerequisite: junior standing. Offered Occasionally.

# ESS 499 Cr.3

#### **Seminar in Physical Education**

The provision of intensified experiences in the solution of some individual or group problem. The utilization of some rudimentary research techniques receive marked attention, including the formulation of hypotheses, the design of study, the collection, analysis, and interpretation of data. Prerequisite: open to students of "honor" quality with senior standing; minimum 2.75 cumulative GPA. Offered Occasionally.