EXERCISE AND SPORT SCIENCE (EXSS)

EXSS 10. Beginning Ballet. 1 Credits.
The technique and vocabulary of classical ballet are presented. Exercises at the barre are followed by practice and combinations in the center. Previously offered as PHYA 208.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 11. Introduction to Dance Technique. 1 Credits.
This course is an introduction to the positions, exercises, and steps common to ballet, jazz, and modern dance. It is designed for students with no previous dance experience and is a prerequisite for EXSS 10, 12, and 13. Previously offered as PHYA 212.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 12. Beginning Modern Dance. 1 Credits.
Students will explore the principles of movement that define modern dance, gaining some understanding of the use of weight, the shape of the body in space, an awareness of timing and energy, and individual creative potential. Previously offered as PHYA 224.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 13. Beginning Jazz Dance. 1 Credits.
Students will explore the roots of the jazz style through rhythm, principles of isolation and opposition, shape and energy through center work, stretches, movement across the floor, and simple routines. Previous ballet training is highly recommended. Previously offered as PHYA 220.

Rules & Requirements
Prerequisites: Ex SS 11.
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 14. Beginning Social Dance. 1 Credits.
The basic step patterns of popular social dances, such as fox trot, waltz, cha-cha, swing or shag, hustle, tango, and others are taught. Confidence in the ability to lead or to follow is developed. Social enjoyment of dance is emphasized. Previously offered as PHYA 231.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 20. Intermediate Ballet. 1 Credits.
For the dancer with a solid understanding of the basics of ballet and several years’ dance training. It emphasizes more sophisticated steps in longer combinations. Previously offered as PHYA 308.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 21. Intermediate Jazz Dance. 1 Credits.
Students will explore the jazz style in greater complexity plus gain understanding of jazz music as it relates to jazz dance. It includes center work, complex movement phrases across floor, adagio, and routines using large movement vocabulary. At least two years of dance and familiarity with jazz style are recommended. Previously offered as PHYA 320.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 22. Intermediate Modern Dance. 1 Credits.
Students will work to develop greater technical skill and continue a more advanced exploration of modern dance principles of effort-shape through center work and phrases of greater length and complexity in the center and across the floor. At least two years of modern dance training are recommended. Previously offered as PHYA 324.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 30. Advanced Ballet. 1 Credits.
For the dancer with substantial background in ballet. Speed, endurance, multiple turns, beats, and complicated combinations are emphasized. Previously offered as PHYA 408.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 32. Advanced Modern Dance. 1 Credits.
This course is designed for the dancer with a solid understanding of the principles underlying modern dance and several years of dance training. It focuses on longer and more complicated phases of movements. Previously offered as PHYA 424.

Rules & Requirements
Repeat Rules: May be repeated for credit. 4 total credits. 4 total completions.
Grading Status: Letter grade.

EXSS 50. First-Year Seminar: Discrimination and Sport. 3 Credits.
This course will examine the American ethos by looking at those who have been discriminated against in sport because of race, gender, sexual orientation, or disability.

Rules & Requirements
SS, US.
EXSS 51. First-Year Seminar: Entrepreneurship in Human Performance and Sport. 3 Credits.
This course will provide students an introduction to the practical entrepreneurial business tools for starting a new business (or for use in an existing organization) in the human performance and/or sport industry.

Rules & Requirements
IDEAs in Action Gen Ed: FY-SEMINAR.
Grading Status: Letter grade.

EXSS 55. First-Year Seminar: Sport Engineering and Human Performance. 3 Credits.
This first year seminar is designed to discuss the limits of human performance and equipment that is engineered to enhance performance. How fast is it possible to run or swim? Will Olympic records continue to be broken? When do we reach our full athletic potential? This course is designed to challenge your thinking about performance using the science that governs biomechanics and human physiology as well as exploring the data that drives equipment development.

Rules & Requirements
IDEAs in Action Gen Ed: FY-SEMINAR.
Grading Status: Letter grade.

EXSS 89. First-Year Seminar: Special Topics. 3 Credits.
Course content will vary each semester.

Rules & Requirements
IDEAs in Action Gen Ed: FY-SEMINAR.
Grading Status: Letter grade.

EXSS 141. Personal Health. 3 Credits.
Elective, open to all students. This course examines basic wellness concepts in the areas of physical fitness, nutrition, disease prevention, mental health, drug abuse, and human sexuality. Emphasis is on the individual's responsibility for his/her own health.

Rules & Requirements
Grading Status: Letter grade.

EXSS 155. Human Anatomy and Physiology I. 3 Credits.
This course is targeted to students enrolled in Department of Exercise and Sport Science majors as well as other students with interest in medical professions. This course involves a systematic approach to human anatomy and physiology with an emphasis on the musculoskeletal, articular and nervous systems as well as anatomical terminology and homeostasis. No prerequisites are required.

Rules & Requirements
Grading Status: Letter grade.

EXSS 175. Human Anatomy. 3 Credits.
The study of the structure of the human body with special emphasis on the musculoskeletal, articular, and nervous systems. Prosected cadaver materials are utilized to study the skeletal muscles and body viscera.

Rules & Requirements
IDEAs in Action Gen Ed: FY-LAUNCH (only designated sections).
Making Connections Gen Ed: PL.
Grading Status: Letter grade.

EXSS 180. Physical Activity in Contemporary Society. 3 Credits.
An examination of the role of physical activity/inactivity on the health and well-being of American society.

Rules & Requirements
Grading Status: Letter grade.

EXSS 181. Sport and Exercise Psychology. 3 Credits.
This course exposes students to psychological aspects contributing to sport/physical activity participation and psychological outcomes of participation. It explores psychological theories and research and their application to the affective, behavioral, and cognitive outcomes of sport/physical activity participants when considering key environmental factors.

Rules & Requirements
Making Connections Gen Ed: VP.
Grading Status: Letter grade.

EXSS 191. Theory and Practice of Modern Dance Technique - Elementary-Level Elective. 3 Credits.
An introduction to modern dance technique, history, and philosophy focusing on the physical principles of movement and their choreographic application. Students will participate in a combination of lectures and studio time.

Rules & Requirements
Making Connections Gen Ed: FY-SEMINAR.
Grading Status: Letter grade.

EXSS 205. Analysis of Sport Skills I. 3 Credits.
A professional preparation course in the skills, knowledge, safety, and teaching progressions of basketball, track and field, and softball/baseball.

Rules & Requirements
Grading Status: Letter grade.

EXSS 206. Analysis of Sport Skills II. 3 Credits.
A professional preparation course in the skills, knowledge, safety, and teaching progressions of soccer, tennis, and volleyball.

Rules & Requirements
Grading Status: Letter grade.

EXSS 207. Coaching Principles. 3 Credits.
A professional preparation course for teaching and coaching. Includes basic instruction in coaching education and principles, pedagogy for coaching, conditioning for athletes, and team building.

Rules & Requirements
Grading Status: Letter grade.

EXSS 208. Health and Physical Education in the Elementary School. 3 Credits.
This course deals with methods and materials of health and physical education in school levels kindergarten through sixth grade. Required of elementary education majors. Does not count toward physical education major.

Rules & Requirements
Grading Status: Letter grade.
EXSS 211. Adapted Physical Education. 3 Credits.
A study of problems related to body mechanics and the needs of the physically handicapped student.

Rules & Requirements
Grading Status: Letter grade.

EXSS 220. Fitness Management. 3 Credits.
Students develop a working knowledge of theories, principles, and operating procedures involved in managing programs, staff, and facilities in the health/fitness industry, including management, marketing, operations, legal aspects.

Rules & Requirements
Grading Status: Letter grade.

EXSS 221. Introduction to Sport Administration. 3 Credits.
In this course, students are introduced to the policies and problems of organizing and administering sport in public and private settings.

Rules & Requirements
Grading Status: Letter grade.

EXSS 223. International Sport Management. 3 Credits.
Because sport cuts across all international boundaries, students must understand the global implications of the sport industry. This course introduces students to the organization, governance, business activities, and intercultural issues in international sport.

Rules & Requirements
Grading Status: Letter grade.

EXSS 256. Human Anatomy and Physiology II. 3 Credits.
This course is targeted to students enrolled in Department of Exercise and Sport Science majors as well as other students with interest in medical professions. This course involves a systematic approach to human anatomy and physiology with an emphasis on the metabolic, endocrine, digestive, cardiovascular, respiratory, renal, integumentary and immune systems.

Rules & Requirements
Requisites: Prerequisite, EXSS 155.
Grading Status: Letter grade.

EXSS 260. Women and Sport. 3 Credits.
A broad based perspective of women’s participation in sport including history of participation, physiological differences, and socio-cultural influences including work, politics, family, economics, and gender roles and identity.

Rules & Requirements
Making Connections Gen Ed: SS.
Grading Status: Letter grade.

Same as: WGST 260.

EXSS 265. Fundamentals of Sports Medicine. 3 Credits.
This course is designed to introduce the undergraduate student to the sports medicine profession and to provide the basic knowledge and skills necessary to recognize, evaluate, and treat injuries to the head and face, cervical spine, thoracic region, abdominal/urogenital region, and extremities.

Rules & Requirements
Requisites: Prerequisite, EXSS 175.
Grading Status: Letter grade.

EXSS 273. Research in Exercise and Sport Science. 3 Credits.
An introduction to research in the fields of physical education, exercise, and sport science with emphasis on understanding and application of research findings.

Rules & Requirements
IDEAs in Action Gen Ed: RESEARCH.
Making Connections Gen Ed: QI.
Grading Status: Letter grade.

EXSS 275L. Human Anatomy Laboratory. 1 Credits.
Required preparation, a grade of B or better in EXSS 175. EXSS 275L is a basic human anatomy laboratory course designed to accompany EXSS 175. For students endeavoring to major in the allied health professions.

Rules & Requirements
Grading Status: Letter grade.

EXSS 276. Human Physiology. 3 Credits.
Instructor may approve equivalents for prerequisite. A lecture course in elementary physiology, covering the various systems of the body.

Rules & Requirements
Making Connections Gen Ed: PL.
Requisites: Prerequisite, EXSS 175.
Grading Status: Letter grade.

EXSS 278. Emergency Care of Athletic Injuries and Illnesses. 3 Credits.
Recommended preparation, EXSS 175. Theory and practice of basic first aid, cardiopulmonary resuscitation, and the acute care of athletic injuries.

Rules & Requirements
Grading Status: Letter grade.

EXSS 290. Special Topics in EXSS. 3 Credits.
Variable topics course in Exercise and Sports Science. Honors version available.

Rules & Requirements
Repeat Rules: May be repeated for credit; may be repeated in the same term for different topics; 6 total credits. 2 total completions.
Grading Status: Letter grade.

EXSS 291. Theory and Practice of Modern Dance Technique - Intermediate-Level Elective. 3 Credits.
An intensive study of modern dance technique and philosophy, focusing on the physical principles of movement and their choreographic application. One hour seminar and four and one-half hours laboratory.

Rules & Requirements
Requisites: Prerequisite, EXSS 191; permission of the instructor for students lacking the prerequisite.
Grading Status: Letter grade.

EXSS 322. Fundamentals of Sport Marketing. 3 Credits.
This course is designed to introduce students to marketing within the sports industry, including the unique aspects of the sport product and sport consumer markets.

Rules & Requirements
Requisites: Prerequisite, EXSS 221.
Grading Status: Letter grade.
EXSS 323. Sport Facility and Event Management. 3 Credits.
This course is designed to develop practical competencies necessary for effectively managing sport facilities and events while providing students with experiential learning opportunities inside and outside the classroom.

Rules & Requirements
Requisites: Prerequisite, EXSS 221.
Grading Status: Letter grade.

EXSS 324. Finance and Economics of Sport. 3 Credits.
This course provides an understanding of the financial and economic growth of sport, economic theory applied to the sport industry, and the basic principles and methods of sound fiscal control.

Rules & Requirements
Requisites: Prerequisites, ECON 101, and EXSS 221.
Grading Status: Letter grade.

EXSS 325. The Role of Intercollegiate Athletics in Higher Education. 3 Credits.
This course is designed to help students interested in working in college sports understand what that role has been and might be in the future, with an emphasis on maximizing the educational value of intercollegiate athletic participation and the integration of athletics with academic and student life dimensions on college campuses.

Rules & Requirements
Grading Status: Letter grade.

EXSS 326. Legal Aspects of Sport. 3 Credits.
This course provides a foundation in general legal concepts and familiarizes students with the legal areas they are most likely to encounter as managers in the sports and fitness industry.

Rules & Requirements
Requisites: Prerequisite, EXSS 221.
Grading Status: Letter grade.

EXSS 327. Predictive Analytics in Sport. 3 Credits.
This course is designed to provide students with an introduction to predictive analytics utilizing regression-based modeling approaches. As a CURE course, students will learn the iterative process of model building through trial and error and by working with other students on hands-on problems. At the conclusion of this course, students will be able to analyze sport-related data using predictive analytics, whether the dependent variable is continuous or binary in nature.

Rules & Requirements
IDEAs in Action Gen Ed: RESEARCH.
Requisites: Prerequisite, STOR 151 or 155 with a grade of B or better.
Grading Status: Letter grade.

EXSS 328. Sport Business Venture. 3 Credits.
This course will provide students an introduction to practical entrepreneurial business tools for starting a new business (or for use in an existing organization) in the sport industry.

Rules & Requirements
Grading Status: Letter grade.

EXSS 360. Sports Nutrition. 3 Credits.
The role of nutrition in maximizing physical performance, promoting health, and controlling body weight. Includes individual nutritional assessments.

Rules & Requirements
Requisites: Prerequisite, EXSS 276 or NUTR 240.
Grading Status: Letter grade.

EXSS 366. Foundations of Sports Medicine Rehabilitation. 3 Credits.
This course is designed to introduce undergraduate students to the basic principles and skills used to rehabilitate sport related injuries with an emphasis on musculoskeletal injuries.

Rules & Requirements
Requisites: Prerequisite, EXSS 265.
Grading Status: Letter grade.

EXSS 367. Therapeutic Modalities. 3 Credits.
This is an advanced athletic training course, designed to provide the athletic training student with knowledge and skills necessary for treating injuries.

Rules & Requirements
Requisites: Prerequisites, EXSS 175, 265, 288, and 366.
Grading Status: Letter grade.

EXSS 368. Therapeutic Exercise and Rehabilitation. 3 Credits.
This is an advanced athletic training course, designed to provide the athletic training student with knowledge and skills necessary for rehabilitating injuries.

Rules & Requirements
Requisites: Prerequisites, EXSS 175, 265, 288, 366, and 367.
Grading Status: Letter grade.

EXSS 369. Athletic Training Seminar. 3 Credits.
A presentation of the historical and current perspectives on athletic training, including techniques for organizing and administering athletic training programs.

Rules & Requirements
Requisites: Prerequisites, EXSS 175 and 288.
Grading Status: Letter grade.

EXSS 370. General Medicine in Athletic Training. 3 Credits.
Advanced course focusing on understanding instrumentation used in assessing internal injury related to sport. Pharmacology, drug testing, psychosocial interventions, and selected emergency procedures pertaining to athletic injury are also presented.

Rules & Requirements
Requisites: Prerequisites, EXSS 175, 265, 276, and 288.
Grading Status: Letter grade.

EXSS 373. Sport Injury Epidemiology. 3 Credits.
This course will introduce the student to the public health importance and epidemiology of injuries and other medical conditions in sport and physical activity.

Rules & Requirements
IDEAs in Action Gen Ed: RESEARCH.
Grading Status: Letter grade.
EXSS 376. Physiological Basis of Human Performance. 4 Credits.
Instructor may approve equivalents for EXSS prerequisites. Students must take laboratory section along with class. The application of physiological principles to sport and physical activity. Both immediate and chronic adaptations to exercise are studied. Two lecture and two laboratory hours a week.

Rules & Requirements
Requisites: Prerequisites, EXSS 175 and 276.
Grading Status: Letter grade.

EXSS 380. Neuromuscular Control and Learning. 3 Credits.
Instructor may approve equivalents for prerequisite. Provides introduction to neuromuscular factors controlling movement and acquisition of motor skills. Promotes application of neuromuscular control and motor learning principles to teaching of motor skills with application to rehabilitation and fields such as athletic training, physical therapy, and coaching.

Rules & Requirements
Requisites: Prerequisite, EXSS 175.
Grading Status: Letter grade.

EXSS 385. Biomechanics of Sport. 3 Credits.
Instructor may approve equivalents for EXSS prerequisite. The study and analysis of human movement including fundamental aspects of the musculoskeletal and articular systems. Principles of biomechanics, including application to neuromuscular fitness activities, aerodynamics in sport, hydrodynamics, rotary motion, throw-like and push-like patterns, and analysis of projectiles.

Rules & Requirements
Requisites: Prerequisite, EXSS 175.
Grading Status: Letter grade.

EXSS 383. Exercise Testing and Prescription. 4 Credits.
Instructor may approve equivalents for EXSS prerequisites. The study and analysis of human movement including fundamental aspects of the musculoskeletal and articular systems. Principles of biomechanics, including application to neuromuscular fitness activities, aerodynamics in sport, hydrodynamics, rotary motion, throw-like and push-like patterns, and analysis of projectiles.

Rules & Requirements
Requisites: ... satisfactory completion of prerequisite course.
Grading Status: Letter grade.

EXSS 393. Sports Medicine Clinical. 1-3 Credits.
This field experience offers implementation of theories and practices of athletic training and sports medicine under the supervision of a certified athletic trainer.

Rules & Requirements
Requisites: Prerequisite, EXSS 175.
Grading Status: Letter grade.

EXSS 395. Undergraduate Research Course. 1-3 Credits.
Permission of the instructor. Majors preferred. Laboratory/research study addressing exercise and sport science questions. Requires final written report. Repeatable for six total credits.

Rules & Requirements
Requisites: ... satisfactory completion of prerequisite course and approval of advisor.
Grading Status: Letter grade.

EXSS 396. Independent Studies in Exercise and Sport Science Elective. 1-3 Credits.
Required preparation, any two relevant courses. Permission of the instructor. Individually designed in-depth study in an area of interest within exercise and sport science. Available to both majors and nonmajors under the supervision of selected EXSS faculty members.

Rules & Requirements
Repeat Rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading Status: Letter grade.

EXSS 397. Critical Analysis of Literature in Sport and Exercise Psychology. 1 Credits.
This course will expose students to research in sport and exercise psychology using the C.R.E.A.T.E. (Consider, Read, Elucidate the hypotheses, Analyze and interpret the data, and Think of the next Experiment) framework. Students will follow the historical publications of one sport and exercise psychology research group to better understand the research process. Each research paper will be digested/critiqued in phases. Student will also formulate their own novel research questions and present them to the class.

Rules & Requirements
Requisites: Prerequisite, EXSS 181.
Grading Status: Letter grade.

EXSS 398. Exercise Prescription for Special Populations. 3 Credits.
Instructor may approve equivalents for prerequisites. This is an intermediate- to upper-level course designed to provide students with theoretical and practical knowledge of the physiological, biomechanical, functional, and administrative aspects of designing and supervising conditioning programs for various populations.

Rules & Requirements
Requisites: Prerequisites, EXSS 175 and 276.
Grading Status: Letter grade.

EXSS 399. Exercise Prescription for Special Populations. 3 Credits.
Instructor may approve equivalents for prerequisites. This is an intermediate- to upper-level course designed to provide students with theoretical and practical knowledge of the physiological, biomechanical, functional, and administrative aspects of designing and supervising conditioning programs for various populations.

Rules & Requirements
Requisites: Prerequisites, EXSS 175 and 276.
Grading Status: Letter grade.

EXSS 400. Exercise Prescription for Special Populations. 3 Credits.
Instructor may approve equivalents for prerequisites. This is an intermediate- to upper-level course designed to provide students with theoretical and practical knowledge of the physiological, biomechanical, functional, and administrative aspects of designing and supervising conditioning programs for various populations.

Rules & Requirements
Requisites: Prerequisites, EXSS 175 and 276.
Grading Status: Letter grade.

EXSS 401. Exercise Prescription for Special Populations. 3 Credits.
Instructor may approve equivalents for prerequisites. This is an intermediate- to upper-level course designed to provide students with theoretical and practical knowledge of the physiological, biomechanical, functional, and administrative aspects of designing and supervising conditioning programs for various populations.

Rules & Requirements
Requisites: Prerequisites, EXSS 175 and 276.
Grading Status: Letter grade.
EXSS 420. Program Planning in Recreation Services. 3 Credits.
This experiential course covers the concepts and skills used in program planning. Students apply their program planning skills to real-life situations and implement a recreation program for a community agency. Previously offered as REC 420.

Rules & Requirements

Making Connections Gen Ed: HI-SERVICE.
Grading Status: Letter grade.

EXSS 424. Sport Sales and Revenue Production Seminar. 3 Credits.
This course will analyze and produce skills essential to the revenue production and sales process commonly found in the sport business. In this class students will develop an understanding and appreciation for the sales and revenue-production process related to a sport franchise and/or organization.

Rules & Requirements

Requisites: Prerequisites, EXSS 221 and EXSS 322.
Grading Status: Letter grade.

EXSS 430. Introduction to Leadership and Group Dynamics. 3 Credits.
An analysis of the techniques, methods, and motives of group and community leaders. Special attention is focused upon the roles of organizational structure, personnel policies, and in-service training programs. Previously offered as REC 430.

Rules & Requirements

Making Connections Gen Ed: CI.
Requisites: Prerequisite, EXSS 221.
Grading Status: Letter grade.

EXSS 433L. Exercise Technique. 1 Credits.
This course is designed to teach students how to lead and coach a group of individuals toward movement proficiency in common athletic-based exercises.

Rules & Requirements

Requisites: Prerequisites, EXSS 175 and EXSS 276.
Grading Status: Letter grade.

EXSS 450. Essentials of Corrective Exercise Training. 3 Credits.
This course provides students with knowledge and experience in designing corrective exercise programs. Students will learn to assess posture, movement quality, range of motion, and strength. Students will also learn to correct abnormalities exercises for various body parts. Knowledge will be gained via lecture and laboratory activities. Previously offered as EXSS 350.

Rules & Requirements

Requisites: Prerequisites, EXSS 175 and 276.
Grading Status: Letter grade.

EXSS 475. Functional Anatomy. 3 Credits.
This course provides an in-depth exploration of joint mechanics. It exposes students to motions of the cervical, thoracic, and lumbar spine as well as the extremities, and relates these concepts to movement of the body during specific activities.

Rules & Requirements

Requisites: Prerequisites, EXSS 175, 276, and 385.
Grading Status: Letter grade.

EXSS 478. Sports Performance Training. 3 Credits.
An upper-level course designed to provide students who have a fitness background with the theoretical and practical knowledge related to the Performance Enhancement Specialization for athletes of all ages.

Rules & Requirements

Requisites: Prerequisites, EXSS 175 and 276.
Grading Status: Letter grade.

EXSS 479. Performance Enhancement Specialization for Health Professionals. 1 Credits.
An upper-level course designed to provide students who have a health profession background with the theoretical and practical knowledge related to the Performance Enhancement Specialization for athletes.

Rules & Requirements

Requisites: Prerequisites, EXSS 175, 276, 366, and 368.
Grading Status: Letter grade.

EXSS 493. Field Experience in Sport Administration. 3 Credits.
This field experience offers implementation of theory and the practical application of sport administration in a sport organization worksite, under the direct supervision of a business professional.

Rules & Requirements

Making Connections Gen Ed: HI-INTERN.
Requisites: Prerequisites, EXSS 221 and at least two of the following: EXSS 322, 323, 324, 326; permission of the instructor required for students lacking the prerequisites.
Repeat Rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading Status: Letter grade.

EXSS 576. Exercise Endocrinology. 3 Credits.
Advanced course examining the responses of the endocrine system to exercise and the adaptations that occur with exercise training. Provides the fundamentals necessary for exercise science and allied health science students to understand the integral role that the endocrine system plays in exercise.

Rules & Requirements

Requisites: Prerequisites, EXSS 175, 276, and 376.
Grading Status: Letter grade.

EXSS 580. Neuromechanics of Human Movement. 3 Credits.
This course explores interactions between the nervous and musculoskeletal systems via integration of concepts from neuroanatomy, neurophysiology, anatomy, neuromuscular control, and biomechanics. Topics include muscle mechanics, sensorimotor function, joint stability, movement disorders, neurocognition, and neuroplasticity following injury and disease. Course meetings involve both lecture and laboratory content.

Rules & Requirements

Requisites: Prerequisites, EXSS 175, 380, and 385.
Grading Status: Letter grade.
EXSS 593. Practicum in Physical Fitness and Wellness. 1-9 Credits.
Recommended preparation, EXSS 360 - site dependent. Current CPR certification and student liability insurance is required. Introductory practical experience to enable student to apply knowledge and skills in a worksite under direct supervision of certified professionals.

Rules & Requirements
IDEAs in Action Gen Ed: HI-INTERN.
Requisites: Prerequisites, EXSS 220, 408, and 410; and one of EXSS 380 or 385.
Repeat Rules: May be repeated for credit. 9 total credits. 9 total completions.
Grading Status: Letter grade.

EXSS 693H. Senior Honors Thesis. 3 Credits.
Required preparation, a cumulative grade point average meeting the University standard and permission of the department. Directed independent research under the supervision of a faculty advisor who teaches in the exercise and sport science curriculum.

Rules & Requirements
IDEAs in Action Gen Ed: RESEARCH.
Requisites: Prerequisite, EXSS 273.
Grading Status: Letter grade.

EXSS 694H. Senior Honors Thesis. 3 Credits.
Required preparation, a cumulative grade point average meeting the University standard and permission of the department. Preparation of an honors thesis and an oral examination on the thesis.

Rules & Requirements
IDEAs in Action Gen Ed: RESEARCH.
Requisites: Prerequisite, EXSS 273.
Grading Status: Letter grade.

EXSS 700. Applied Statistics and Research Methods in Exercise and Sport Science. 3 Credits.

Rules & Requirements
Grading Status: Letter grade.

EXSS 705. Research Design and Methods. 1-3 Credits.
Required preparation, any undergraduate statistics course. Builds heavily upon material presented in EXSS 700. Planning, conducting, and reporting of research. Thesis writing and writing for publication. Problem-solving and practical experience in applied statistical analysis, interpretation, and presentation of data from the field of exercise and sport science.

Rules & Requirements
Repeat Rules: May be repeated for credit; may be repeated in the same term for different topics; 3 total credits. 3 total completions.
Grading Status: Letter grade.

EXSS 730. Management of Athletic Injuries. 3 Credits.
Permission of the instructor for nonmajors. Designed to provide basic knowledge and skills that aid in the prevention and treatment of injuries common to athletics.

Rules & Requirements
Grading Status: Letter grade.

EXSS 732. Human Anatomy for Athletic Trainers. 4 Credits.
Graduate standing in exercise and sport science or permission of the instructor. The study of gross human anatomy, with emphasis on the functional and clinical aspects of the neck, back, and extremities as related to athletic injuries.

Rules & Requirements
Grading Status: Letter grade.

EXSS 733. Psychological Considerations for Injury and Rehabilitation. 3 Credits.
Athletic training graduate students only. Psychological impact of injury and rehabilitation on the injured athlete. Stress from injury, coping skills for the rigors of rehabilitation, and the improvement of communication skills in order to better the relationship between the athletic trainer, the injured athlete, and the injured athlete's coach.

Rules & Requirements
Grading Status: Letter grade.

EXSS 735. Sports Medicine Analysis: Special Problems Related to Sports Medicine. 3 Credits.
Permission of the instructor for nonmajors. Problem and research oriented.

Rules & Requirements
Grading Status: Letter grade.

EXSS 736. Clinical Methods in Athletic Training. 3 Credits.
Analysis of theories and techniques used in clinical sports medicine settings.

Rules & Requirements
Requisites: Prerequisite, EXSS 730.
Grading Status: Letter grade.

EXSS 737. Advanced Muscular Assessment and Treatment. 3 Credits.
Discussion of mechanical properties and healing of musculoskeletal tissues throughout the life cycle, and laboratory/seminar units concerned with assessment and treatment of musculoskeletal pathology.

Rules & Requirements
Requisites: Prerequisites, EXSS 730, 732, and 736; Permission of the instructor for students lacking the prerequisite.
Grading Status: Letter grade.

EXSS 738. Laboratory Techniques in Sports Medicine. 3 Credits.
This course provides an introduction to measurement techniques used in sports medicine/athletic training research. Course meetings involve lecture and laboratory sessions which encompass data collection, analysis, and interpretation techniques.

Rules & Requirements
Grading Status: Letter grade.
EXSS 739. Practicum in Athletic Training. 3 Credits.
Graduate standing in exercise and sport science or permission of the instructor. The implementation of theories and practices in a professional setting under the direction of a competent practitioner.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 740. Administration of Sport. 3 Credits.
Permission of the instructor for nonmajors. Policies and problems of organization and administration of athletic programs in colleges.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 742. Social Issues in Exercise and Sport. 3 Credits.
A comprehensive study of race and gender discrimination, adherence, value development, violence, and other socialization factors in youth, collegiate, and Olympic sport.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 744. Collegiate Sport Marketing. 3 Credits.
Graduate standing required. This course is designed to develop a thorough understanding of sport marketing principles and their application to collegiate athletics.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 746. Organizational and Financial Management of Sport. 3 Credits.
Graduate standing in exercise and sport science or permission of the instructor. The study of administrative structures and financial concerns of collegiate athletic programs. An intensive study of NCAA regulations is included.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 747. College Sport Facility and Event Management. 3 Credits.
This course provides students with necessary knowledge and skills to manage college-sport facilities and plan a complete sport event. Students also evaluate facility functions related to risk and event management.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 748. Legal Issues in Collegiate Sport. 3 Credits.
Provides an introduction to the United States legal system, legal principles, and legal issues related to intercollegiate athletics.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 749. NCAA Governance and Compliance. 3 Credits.
The implementation of theories and practices in a professional setting under the direction of a competent practitioner.

**Rules & Requirements**
Requisites: Prerequisite, EXSS 740.
Grading Status: Letter grade.

EXSS 750. Sport Administration Leadership Seminar I. 1 Credits.
Successful completion of first year in sport administration graduate program. An introduction of organizational leadership concepts in a practical applied context. Students will lead class discussion tying relevant current events with leadership theory.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 751. Sport Administration Leadership Seminar II. 1 Credits.
Successful completion of first year in sport administration graduate program. An introduction of organizational leadership concepts in a practical applied context. Students will lead class discussion tying relevant current events with leadership theory.

**Rules & Requirements**
Grading Status: Letter grade.

EXSS 770. Motor Learning. 3 Credits.
A study of the physical and psychological factors that influence skill acquisition and performance in sport and exercise, including applications to teaching and coaching.

**Rules & Requirements**
Requisites: Prerequisite, EXSS 380; Permission of the instructor for students lacking the prerequisite.
Grading Status: Letter grade.

EXSS 780. Physiology of Exercise. 3 Credits.
The study of the physical, biochemical, and environmental factors that influence human performance. Emphasis is placed on metabolic, cardiovascular, respiratory, muscular, and endocrine systems. Three hours of lecture and two hours of laboratory per week.

**Rules & Requirements**
Requisites: Prerequisite, EXSS 276 or 376.
Grading Status: Letter grade.
Same as: HMS 702.

EXSS 781. Clinical Exercise Prescription and Testing. 2-3 Credits.
This course concentrates on the knowledge and skills necessary for providing exercise testing and prescription in the clinical setting, emphasizing cardiac rehabilitation.

**Rules & Requirements**
Requisites: Prerequisite, EXSS 376; permission of the instructor for students lacking the prerequisite.
Grading Status: Letter grade.

EXSS 782. Nutritional Aspects of Exercise. 2-3 Credits.
Graduate standing in physical education or permission of the instructor. Exploration of the role of macronutrients and micronutrients as they apply to exercise, physical conditioning, and competition. Students obtain experience in dietary analysis as it applies to athletic populations.

**Rules & Requirements**
Grading Status: Letter grade.
EXSS 783. Assessment of Physiological Functions in Exercise. 3 Credits.
Designed to develop laboratory techniques and experimental design skills as applied to the physiology of human performance.

Rules & Requirements
Requisites: Prerequisite, EXSS 780; Permission of the instructor for students lacking the prerequisite.
Repeat Rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading Status: Letter grade.

EXSS 784. Advanced Topics in Exercise Physiology. 3 Credits.
Required preparation, completion of a graduate level exercise physiology course. Graduate standing required. This course deals with current and rapidly developing aspects of the exercise physiology field. Specifically enhancing and adding to the content area of basic physiology acquired in EXSS 780.

Rules & Requirements
Grading Status: Letter grade.

EXSS 785. Seminar in Exercise Physiology. 3 Credits.
Graduate standing in exercise and sport science or permission of the instructor. In-depth study of selected advanced topics in exercise physiology. Emphasis on metabolism, biochemical, and cardiorespiratory physiology, with student presentations on selected topics.

Rules & Requirements
Grading Status: Letter grade.

EXSS 789. Practicum in Exercise Physiology. 3-4 Credits.
The implementation of theories and practices of fitness or cardiac rehabilitation in a professional setting under the direction of an experienced practitioner.

Rules & Requirements
Requisites: Prerequisite, EXSS 410L, 780, or 781; permission of the instructor for students lacking the prerequisite.
Grading Status: Letter grade.

EXSS 890. Special Topics in Exercise and Sport Science. 1-3 Credits.
Graduate standing or permission of the instructor. The study of special topics directed by an authority in the field.

Rules & Requirements
Grading Status: Letter grade.

EXSS 990. Research in Exercise and Sport Science. 1-3 Credits.
Graduate standing in exercise and sport science or permission of the instructor. Individually designed research projects conducted by students under the direction of a graduate faculty member.

Rules & Requirements
Grading Status: Letter grade.

EXSS 993. Master's Research and Thesis. 3 Credits.

Rules & Requirements
Repeat Rules: May be repeated for credit.