

# DEPARTMENT OF EXERCISE AND SPORT SCIENCE

## Introduction

The mission of the Department of Exercise and Sport Science is to discover and promote knowledge of human movement to improve quality of life.

Exercise and sport science examines the anatomy, physics, physiology, and psychology of sport and exercise. The general major provides foundational courses in exercise science that prepares students for many paths. Students interested in sport administration can build a foundation in the management of sport, and explore career options related to amateur, interscholastic, or professional sport operation and business. The fitness professional program is designed to prepare students for careers in a variety of health-related fields, including but not limited to entry-level positions in the health-fitness industry; personal training of amateur, professional, and recreational athletes; exercise therapy for a range of clinical conditions; or graduate study in exercise physiology. Other career options for majors include strength-conditioning coach for an athletic team; exercise research within the athletic, medical, or pharmaceutical industries; or fitness club entrepreneur. By choosing additional courses, students can apply to schools of physical therapy, occupational therapy, athletic training, public health, nursing, or medicine.

## Advising

All majors and minors have a primary academic advisor from the Academic Advising Program (<https://advising.unc.edu/>). Students are strongly encouraged to meet regularly with their advisor and review their Tar Heel Tracker each semester. In the Department of Exercise and Sport Science four faculty members serve as advisors with weekly office hours (see "Programs" above and contact information on the website). The department communicates via a listserv, Facebook posts, tweets, blog posts, classroom "advising" visits, bulletin boards/video boards throughout the building, and the departmental website (<http://exss.unc.edu/>). Departmental academic advising is particularly important for those majors who are considering graduate school. Further information on courses, undergraduate research opportunities, the honors program, careers, and graduate schools may be obtained from the department's website (<http://exss.unc.edu/>).

## Facilities

In addition to classroom space and physical activity area, Fetzer Hall, Woollen Gym, and Stallings-Evans Sports Medicine Center house several well-equipped research and teaching laboratories:

1. The Applied Physiology Laboratory is fully equipped to measure metabolism, body composition, and aerobic fitness. Additionally, it houses a chemistry laboratory to study the biochemistry of exercise.
2. The Cadaver Anatomy Laboratory is designed to teach cadaver dissection in order to gain a greater knowledge about how the human body works in an athletic environment.
3. The Exercise Science Teaching Laboratory was specifically designed for teaching exercise science laboratory experiences as well as clinical exercise testing experiences.
4. The MOTION Science Institute, comprised of four research laboratories (Motion Analysis Laboratory, Neuromuscular Assessment Laboratory, Gait Biomechanics Laboratory, and

Psychology of Sport Injury Laboratory), is fully equipped to evaluate neuromuscular function, biomechanics, and psychological factors associated with musculoskeletal injury prevention.

5. The CPR Laboratory is a teaching laboratory for CPR and first aid skills. The laboratory is equipped with mannequins, AED trainers, and first aid equipment.
6. The Exercise Oncology Laboratory is equipped with the latest technology for the assessment of cardiorespiratory and pulmonary function, body composition, cognitive function, electrocardiogram monitoring capability, and evaluation of heart rate coherence and heart rate variability in oncology patients.
7. Through its clinical and research initiatives, the Matthew Gfeller Sport-Related Traumatic Brain Injury Research Center demonstrates its commitment to providing the highest level of care for athletes of all ages suffering from sport-related brain injuries, and to assisting parents, coaches, and medical professionals in managing these athletes.
8. The Athletic Training Teaching Laboratory is designed for students to practice evaluation, treatment, and rehabilitation skills. It is equipped with treatment tables, evaluation tools, rehabilitation supplies such as foam rollers, exercise balls, and taping supplies.
9. The Cardiometabolic Laboratory investigates: the interactions between lifestyle behaviors and cardiometabolic health with a particular interest in sedentary behavior and young adults, the development and interpretation of methodologies for assessing cardiometabolic health, and the translation of basic and applied science in regards to public health outcomes.

## Graduate School and Career Opportunities

Many undergraduate exercise and sport science majors are preparing for graduate work in related areas: exercise physiology, physical therapy, sports medicine, nutrition, athletic training, sports administration/management, etc. They will be well-prepared for master's and doctoral programs, and graduate assistantships in these areas at UNC–Chapel Hill and other large universities. Numerous career opportunities exist in a variety of fields directly related to sport and exercise. Some graduates go directly into health/fitness/sport-related employment. Others attend professional schools or pursue advanced academic degrees.

### Majors

- Exercise and Sport Science Major, B.A.–General (<http://catalog.unc.edu/undergraduate/programs-study/exercise-sport-science-major-ba-general/>)
- Exercise and Sport Science Major, B.A.–Fitness Professional (<http://catalog.unc.edu/undergraduate/programs-study/exercise-sport-science-major-ba-fitness-professional/>)
- Exercise and Sport Science Major, B.A.–Sport Administration (<http://catalog.unc.edu/undergraduate/programs-study/exercise-sport-science-major-ba-sport-administration/>)

### Minors

- Coaching Education Minor (<http://catalog.unc.edu/undergraduate/programs-study/coaching-education-minor/>)
- Exercise and Sport Science Minor (<http://catalog.unc.edu/undergraduate/programs-study/exercise-sport-science-minor/>)
- Sports Medicine Minor (<http://catalog.unc.edu/undergraduate/programs-study/sports-medicine-minor/>)

### Graduate Program

- M.A. in Exercise and Sport Science (<http://catalog.unc.edu/graduate/schools-departments/exercise-sport-science/>)

## Professors

Claudio L. Battaglini, J. Troy Blackburn, Kevin M. Guskiewicz, Anthony C. Hackney, Jason P. Mihalik, Barbara Osborne, Darin A. Padua, Brian G. Pietrosimone, William E. Prentice, Eric D. Ryan, Abbie E. Smith-Ryan, Erianne A. Weight.

## Associate Professors

Erik D. Hanson, Jonathan A. Jensen, Zachary Y. Kerr, Kristen L. Kucera, Micheal D. Lewek, Nels K. Popp, Johna Register-Mihalik, Lee Stoner, Erik A. Wikstrom.

## Assistant Professors

Shelby E. Baez, Malia Blue, Jimikaye B. Courtney, Adam C. Kiefer.

## Teaching Professor

Meredith A. Petschauer.

## Teaching Associate Professor

Alain J. Aguilar, Jonathan D. DeFreese.

## Teaching Assistant Professors

Rebecca L. Battaglini, Benjamin M. Goerger, Wayne McDonnell Jr., Aliza K. Nedimyer, Kristin S. Ondrak, Anthony F. Patterson, Leon R. Schimmelfing, Danielle M. Smith.

## Research Associate Professor

Wesley R. Cole.

## Research Assistant Professor

Gena R. Gerstner.

## Lecturers

Bradley Bates, John Brunner, Richard T. Kagan, Greg Moore, James Strong, Nina Walker, Sunny Yu.

## Postdoctoral Research Associates

Thomas Birchmeier, Madison Chandler, Simon Higgins, Cortney Lago, Caroline Lisee, Craig Paterson, Aaron Sinnott.

## Professor of the Practice

Richard A. Baddour.

## Professors Emeriti

M. Deborah Bialeschki, John E. Billing, Bonita L. Marks, Robert G. McMurray, Frederick O. Mueller, John M. Silva.

## Teaching Professor Emeriti

Sherry Salyer.

## Adjunct Professors

David J. Berkoff, Deborah L. Givens, Micheal T. Gross, Stephen W. Marshall, Karen L. McCulloch, Todd Schwartz.

## Adjunct Associate Professors

Kevin Carneiro, Vicki S. Mercer.

## Adjunct Assistant Professors

Avinash Chandran, Shawn Kane, James Lynch, Michael Mazzoleni.

## Courses

### EXSS—Exercise and Sport Science

#### Undergraduate-level Courses

#### 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

**Requisites:** Prerequisite, EXSS 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**

**IDEAs in Action Gen Ed:** FY-SEMINAR.

**Making Connections Gen Ed:** SS, US.

**Grading Status:** Letter grade.

**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.

**Making Connections Gen Ed:** EE- Field Work.

**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**

**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:** VP.

**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**

**Making Connections Gen Ed:** EE- Field Work.

**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 288. 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.

**Making Connections Gen Ed:** EE- Mentored 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 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**

 **IDEAs in Action Gen Ed:** HI-INTERN.

**Making Connections Gen Ed:** EE- Field Work.

**Requisites:** Prerequisites, EXSS 175 and 265 or 288.

**Repeat Rules:** May be repeated for credit. 5 total credits. 5 total completions.

**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**

**IDEAs in Action Gen Ed:** RESEARCH.

**Making Connections Gen Ed:** EE- Mentored Research.

**Repeat Rules:** May be repeated for credit. 6 total credits. 6 total completions.

**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.

**Advanced Undergraduate and Graduate-level Courses****EXSS 408. Theory and Application of Strength Training and Conditioning for Fitness Professionals. 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 409. Exercise Prescription for Special Populations. 3 Credits.**

Exercise benefits everybody. This course will teach evidence-based information for developing, modifying and implementing fitness programs for individuals with chronic disease, metabolic, cardiac, pulmonary, and other issues deemed as special populations. The knowledge and skills attained in this course will enhance any basic personal training certification and give a better understanding of working with what could be considered the general public.

**Rules & Requirements**

**Requisites:** Prerequisite, EXSS 175, 276, and 376.

**Grading Status:** Letter grade.

**EXSS 410. Exercise Testing and Prescription. 4 Credits.**

Students must take laboratory section along with class. This is an upper division undergraduate course designed to provide the theoretical and practical knowledge in basic exercise testing and prescription for both healthy and select special populations.

**Rules & Requirements**

**Requisites:** Prerequisites, EXSS 175, 276 and 376.

**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 RECR 420.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** HI-SERVICE.

**Making Connections Gen Ed:** EE- Service Learning.

**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 RECR 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**

 **IDEAs in Action Gen Ed:** HI-INTERN.

**Making Connections Gen Ed:** EE- Academic Internship.

**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.

**Making Connections Gen Ed:** EE- Academic Internship.

**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.

**Making Connections Gen Ed:** EE- Mentored 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.

**Making Connections Gen Ed:** EE- Mentored Research.

**Requisites:** Prerequisite, EXSS 273.

**Grading Status:** Letter grade.

**LFIT–Lifetime Fitness**

*One lifetime fitness course is a graduation requirement for all students at UNC–Chapel Hill (post-2006 curriculum). Students are encouraged to complete the lifetime fitness requirement during their first year of study. Effective in fall 2011, a student may enroll in only one LFIT course and may count only one, one-credit LFIT course toward graduation at Carolina. These courses combine practice in a sport or physical activity with general instruction in lifelong health.*



## Undergraduate-level Courses

### LFIT 102. Lifetime Fitness: Adapted Physical Activity. 1 Credits.

Assignments to this class are made for students with special needs in physical activities focusing primarily on acute and chronic physical limitations. Activities are assigned commensurate with interests and abilities. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 103. Lifetime Fitness: Aerobics. 1 Credits.

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course includes various forms of aerobics. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 104. Lifetime Fitness: Exercise and Conditioning. 1 Credits.

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. Activities will promote cardiovascular endurance, muscular strength and endurance, and flexibility. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 105. Lifetime Fitness: Indoor Sports. 1 Credits.

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. Activity portion of the course includes basketball, volleyball, and indoor soccer. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 106. Lifetime Fitness: Beginning Jogging. 1 Credits.

This course is an introduction fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course promotes cardiovascular fitness through jogging. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 107. Lifetime Fitness: Intermediate Jogging. 1 Credits.

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. Activity portion for students who can complete 30 minutes of jogging. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 108. Lifetime Fitness: Outdoor Sports. 1 Credits.

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. Activity portion of course includes ultimate frisbee, flag football, and soccer. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 109. Lifetime Fitness: Racquet Sports. 1 Credits.

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course includes badminton, tennis, and racquetball. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 110. Lifetime Fitness: Beginning Swimming. 1 Credits.

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course includes swimming skills for beginners. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### LFIT 111. Lifetime Fitness: Swim Conditioning. 1 Credits.

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course promotes cardiovascular fitness through swimming. Students can enroll in only one LFIT course during their career at Carolina.

#### Rules & Requirements

 IDEAs in Action Gen Ed: LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 112. Lifetime Fitness: Walking. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course promotes cardiovascular fitness through walking. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 113. Lifetime Fitness: Weight Training. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion includes basic techniques of weight training. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 114. Lifetime Fitness: Yoga and Pilates. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion includes basic instruction in both yoga and pilates. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 115. Lifetime Fitness: Cycle Fitness. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion includes basic instruction in cycle fitness. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 118. Lifetime Fitness: Flag Football. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course includes basic instruction in flag football. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 129. Lifetime Fitness: Downhill Skiing and Snowboarding. 1 Credits.**

An introduction to fitness and wellness that includes developing personal fitness programs and instruction in physical activity. The activity portion includes basic conditioning and instruction in both downhill skiing and snowboarding, including five days in Boone, NC. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 130. Lifetime Fitness: Soccer. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion will provide soccer instruction and game play. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 138. Lifetime Fitness: Tennis. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course includes basic instruction in tennis. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 140. Lifetime Fitness: Ultimate Frisbee. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course includes basic instruction in ultimate frisbee. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

**LFIT 145. Lifetime Fitness: Brazilian Jiu Jitsu. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course includes basic instruction in Brazilian jiu jitsu. Students can enroll in only one LFIT course during their career at Carolina.

**Rules & Requirements**

**IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### **LFIT 146. Lifetime Fitness: Sand Volleyball. 1 Credits.**

This course is an introduction to fitness and wellness, and includes developing personal fitness programs and instruction in physical activity. The activity portion of the course includes basic instruction in sand volleyball. Students can enroll in only one LFIT course during their career at Carolina.

#### **Rules & Requirements**

 **IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

### **LFIT 190. Special Topics in Lifetime Fitness. 1 Credits.**

This course is designed to cover the study and practice of special topics directed by an authority in the field. Subject matter will vary per instructor and topic. Students can enroll in only one LFIT course during their career at Carolina.

#### **Rules & Requirements**

 **IDEAs in Action Gen Ed:** LIFE-FIT.

**Making Connections Gen Ed:** LF.

**Grading Status:** Pass/Fail.

## **PHYA—Physical Activity**

### **Undergraduate-level Courses**

#### **PHYA 201. Adapted Physical Activity. 1 Credits.**

Assignments to this class are made for students with special needs in physical education focusing primarily on acute and chronic physical limitations. Activities are assigned commensurate with interests and abilities. Students are required to present an exercise prescription from a physician including prescribed activities and limitations.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

#### **PHYA 202. Beginning Aerobics. 1 Credits.**

Provides a cardiovascular fitness program incorporating physiologically safe dance and exercise movements to music. It develops strength, flexibility, and improved cardiorespiratory efficiency.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

#### **PHYA 203. Aerobic Circuit Training. 1 Credits.**

Challenges students to achieve higher levels of overall fitness in a cardiovascular program that combines stations of muscular strength with endurance while incorporating a wide variety of equipment. Students are expected to be able to participate in a minimum of 20 minutes of aerobic exercise.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

#### **PHYA 205. Archery. 1 Credits.**

Designed to teach the beginning student proper techniques of target shooting with a bow and arrow, this course deals with history, terminology, safety, and equipment selection. Shooting techniques included are the stance, nocking, drawing, anchoring, aiming, releasing, and following through. The use of the bowsight and target scoring are presented.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

#### **PHYA 206. Badminton. 1 Credits.**

The course includes an orientation to the history and rules of the game, terminology, and equipment. Basic skills and techniques include the proper grip, stance, footwork, forehand and backhand clears, long and short serves, net shots, around-the-head shot, and the smash. Presents basic single and double game strategies.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

#### **PHYA 209. Beginning Basic Training. 1 Credits.**

Beginning physical fitness program based on the model used by the United States Army Physical Fitness Academy and designed to improve aerobic and anaerobic strength, endurance, and overall physical fitness.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

#### **PHYA 210. Beginning Bowling. 1 Credits.**

Presents terminology of the game, various grips and stances, the delivery approach, release, and follow through. Pick up spare leaves, releasing straight, hook, and back-up balls, reading the lanes, and handicapping are also included. Rules and scoring as well as tournament bowling are learned.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

#### **PHYA 211. Cycling. 1 Credits.**

The purpose of this course is to introduce students to the history and skill of cycling. The course will focus on maintenance of the bicycle, fitness acquired through the use of cycling, and the skills of climbing, descending, cornering, and balance.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 213. Exercise and Conditioning. 1 Credits.**

Covers activities that promote cardiovascular endurance, muscular strength and endurance, and flexibility. The course content includes fitness evaluation, stretching, weight training, aerobic exercise, jogging, and circuit training. Individual exercise programs are developed.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 214. Beginning Fencing. 1 Credits.**

Introduces students to the history, rules, and terminology of the sport of fencing. It traces the development of ancient and modern weapons; presents warm-up, stretching, and conditioning exercises that are specific to the sport; and covers grip, basic positions, and footwork. Individual and team competitions are conducted in the course.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 216. Beginning Golf. 1 Credits.**

Stresses swing motion and the basic fundamentals. Techniques of the full swing and the short game are presented. Rules and etiquette are covered. Students who shoot 115 or less for 18 holes are not eligible for this beginner course.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 217. Beginning Tumbling and Gymnastics. 1 Credits.**

Through proper progression, students are exposed to compulsory routines on several pieces of gymnastic apparatus—including the balance beam, parallel bars, pommel horse, rings, horizontal bar—and strength, flexibility, and gross motor coordination. Emphasis is placed on safe spotting techniques and safety awareness.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 219. Beginning Horseback Riding. 1 Credits.**

Introduces students to tacking, grooming, and riding the basic gaits of walk, trot and canter. An additional fee is required; this course is taught off campus.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 221. Beginning Jogging. 1 Credits.**

The purpose of this course is to provide students with the opportunity to develop cardiovascular fitness through a popular activity. Selection of proper clothing and equipment, the physiological effects of a jogging program, care and prevention of common injuries, and the mechanics of jogging are presented.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 222. Karate. 1 Credits.**

This course offers an introduction to the basics of one of many martial art styles. Emphasis is on traditional forms, basic movements, philosophy, discipline, and proper class conduct. Students will learn various stances and forms.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 223. Lifeguard Training. 1 Credits.**

This course will teach the skills needed to help prevent and respond to aquatic emergencies. This includes land and water skills, first aid and CPR/AED.

**Rules & Requirements**

**Requisites:** Prerequisites, continuous 300 yard swim, two minutes of treading with no arms, and retrieving a 10 pound brick from 10 feet and swimming 20 yards.

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 225. Beginning Racquetball. 1 Credits.**

The course introduces the beginner to basic skills, including forehand and backhand drives, grips, footwork, and serves. Safety considerations as well as rules and terminology are covered. Basic strategy is presented involving the return of service, use of ceiling, rear wall, pass, and kill shots.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 227. Scuba. 1 Credits.**

Required preparation, some swimming skills. This course prepares students for participation in recreational diving: both skin diving and scuba. Lectures cover physiology of diving, first aid, and decompression. It can lead to certification if students attend open water training dives conducted at the semester's end. An additional fee is required.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 228. Self-Defense. 1 Credits.**

This course introduces the basics of self-defense techniques and will instruct the student by incorporating a three-dimensional educational approach. The student will develop skill, knowledge and self-confidence as related to self-defense.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 229. Downhill Skiing. 1 Credits.**

This course is conducted in Boone, North Carolina, for five days over the winter break. It includes orientation to proper equipment selection, the use of lifts and tows, and the basic fundamentals, such as parallel turns, edging concepts, and rhythm. An additional fee is required.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 230. Beginning Soccer. 1 Credits.**

Basic soccer skills are presented including dribbling, shooting, passing, heading, trapping, and tackling. Position play and strategies for basic offense and defense are learned as well as rules and terminology. Conditioning is achieved through drills and game play.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 233. Beginning Squash. 1 Credits.**

Basic shots are learned including forehand and backhand drives, corners, reverse corners, volleys, drop shots, and serves. Rules, terminology, and basic strategies are presented. Appreciation of squash as a game for fitness and fun is developed.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 235. Beginning-Level Swimming. 1 Credits.**

The course consists of swimming skills for students with limited water experience. These skills include water adjustment, floating, kicking, front crawl stroke, rhythmic breathing, and elementary backstroke. Emphasis is on efficient movement through the water. Foundation skills taught enable students to enjoy swimming and other aquatic activities as a lifetime sport. Basic water safety and first aid procedures are included.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 236. Swim Conditioning. 1 Credits.**

This course is designed to promote cardiovascular fitness through swimming. Conditioning and the refinement of stroke techniques will be stressed through stroke practice and workout routines. Topics will include stroke mechanisms of the four competitive strokes, starts, turns, interval, sprint, and long distance training.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 238. Tennis. 1 Credits.**

Basic skills are learned including forehand and backhand groundstrokes, the volley, and the serve. Rules, terminology, and basic game strategy will be taught. Through play, an increased level of fitness and skill will be gained to promote participation in tennis throughout life.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 239. Triathlon Training. 1 Credits.**

The purpose of this course is to introduce students to the sport of triathlons integrating the discipline of running, cycling, and swimming. The course is physically challenging and provides information on transitions and maintenance of equipment, as well as setting up a training program.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 240. Ultimate Frisbee. 1 Credits.**

Teaches the knowledge, skills, and rules of ultimate frisbee in order to develop a lasting interest in lifetime participation and to increase the student's level of physical fitness

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 241. Beginning Volleyball. 1 Credits.**

Basic skills are taught including the forearm pass, the overhead pass, setting, spiking, blocking, dinking, and serving. Rules and terminology are included. Basic offensive and defensive strategy is learned.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.



**PHYA 242. Water Safety Instructor. 1 Credits.**

This course will train students to teach American Red Cross progressive swimming and water safety courses. Course content includes analysis of stroke mechanics, review of water safety skills, and investigation of teaching methodology. Students need to be proficient in front crawl, back crawl, elementary backstroke, breaststroke, and sidestroke.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 243. Beginning Weight Training. 1 Credits.**

Basic techniques and knowledge of variable resistance and free weight systems are taught. Fitness evaluation and individual workout programs are included. Development of muscular strength and endurance is stressed. Physiological principles of fitness and their relationships to weight training are also emphasized.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 245. Brazilian Jiu Jitsu. 1 Credits.**

This course will combine instruction in, and practice of, a sport or physical activity that can be sustained in later life, together with instruction in lifelong health.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 246. Sand Volleyball. 1 Credits.**

Students will gain skills necessary to develop a lasting interest in sand volleyball and to increase the student's level of physical fitness. Students will also learn the rules of the sport and how it differs from indoor volleyball.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 290. Special Topics. 1 Credits.**

This course is designed to cover the study and practice of special topics directed by an authority in the field. Subject matter will vary per instructor and topic.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 302. Intermediate Aerobics. 1 Credits.**

Challenges students to achieve higher levels of cardiovascular, flexibility, and strength fitness through dance and exercise movements to music. Students are expected to be able to participate in a minimum of 20 minutes of aerobic activities.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 310. Intermediate Bowling. 1 Credits.**

Focuses on refinement of the experienced student's delivery mechanics including the approach, release, and follow through. Maximum quality practice time is emphasized. Alternative approaches and releases are presented and several types of tournaments are conducted.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 314. Intermediate Fencing. 1 Credits.**

A review of the footwork and bladework covered in the beginning. Emphasis in this course is on individual and paired exercises rather than on large group lessons. An introduction to officiating is also covered in conjunction with greater competitive opportunities.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 316. Intermediate Golf. 1 Credits.**

Builds on and refines the basic fundamentals of the swing motion. Ball flight control is introduced with more in-depth swing analysis. Students who shoot 85 to 115 for 18 holes are eligible for this course.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 317. Intermediate Tumbling and Gymnastics. 1 Credits.**

The purpose of this course is to provide students with the opportunity to learn more difficult gymnastics skills and to incorporate them in a fluid routine. Added emphasis is placed on muscular strength and flexibility. Safe spotting techniques, particularly for more advanced skills, are stressed throughout the course.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 319. Intermediate Horseback Riding. 1 Credits.**

Students are introduced to jumping; emphasis is placed on learning more balance and control in the three basic gaits. Dressage is introduced. An additional fee is required; this course is taught off campus.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 321. Intermediate Jogging. 1 Credits.**

Introduces students to the cardiovascular and overall fitness benefits of running. Students will learn how running can be a lifetime activity when approached sensibly and effectively. Students are expected to be able to run three miles in under 30 minutes prior to registering for this course.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 325. Intermediate Racquetball. 1 Credits.**

Students will review beginning skills. Aspects of competition will be covered, including match preparation, officiating a match, and tournament play. Specific practice will involve shot selection and placement and back wall play.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 330. Intermediate Soccer. 1 Credits.**

Basic skills are reviewed and refined. Dead ball situations are studied, especially corner kicks and direct and indirect free kicks. Different systems of play are introduced and evaluated. Positional play is stressed in the development of advanced defensive and offensive tactics.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 335. Intermediate Swimming. 1 Credits.**

Techniques for crawl, sidestroke, elementary backstroke, back crawl, and breaststroke are covered. Basic water rescue skills are presented including first aid procedures. Physical fitness is promoted through swimming.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 338. Intermediate Tennis. 1 Credits.**

Increased proficiency in four basic skills will be developed. New shots taught include the overhead, the drop, the lob, and spin serve. Strategy for singles and doubles play will be stressed. Emphasis is on increased pace and ball placement.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 341. Intermediate Volleyball. 1 Credits.**

Students improve execution of basic skills through practice. Stresses safe execution of dives and rolls. Teaches various offensive strategies and defensive alignments. Emphasizes team play.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 343. Intermediate Weight Training. 1 Credits.**

Emphasizes the development of individualized muscular strength and endurance programs following instruction in the physiological principles and techniques of weight training. Students should have beginning weight training skills, techniques, and knowledge prior to enrolling in this class.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**Advanced Undergraduate and Graduate-level Courses****PHYA 402. Leading Group Fitness Activities. 1 Credits.**

All aspects of leading group fitness activities will be explored and applied, including components of an aerobic exercise class, modifications for individual needs and special populations, health screening, fitness testing.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 409. Advanced Basic Training. 1 Credits.**

Advanced fitness program based on the model used by the United States Army Physical Fitness Academy to further improve aerobic and anaerobic fitness. Builds on conditioning level obtained in PHYA 209.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 414. Advanced Fencing. 1 Credits.**

A review of the footwork and bladework covered in the intermediate course; pair exercises and individual lessons dealing with both technique and tactics. Emphasis in this course is on individual and paired exercises rather than on large group lessons. Officiating is also covered in conjunction with greater competitive opportunities.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 416. Advanced Golf. 1 Credits.**

Required preparation, a 15 or less handicap. Comprising this course are the ability to score, the analysis of strategy and shot production, and improvement of self-awareness and coping strategies.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 419. Advanced Horseback Riding. 1 Credits.**

Provides more technical flatwork at the walk, trot, and canter, as well as jumping. Course work will be primarily jumping. An additional fee is required; this course is taught off campus.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 427. Advanced Open Water Scuba Diving. 1 Credits.**

Nationally recognized scuba certification may substitute for prerequisite. The course will follow the PADI Advanced Open water course curriculum which contains five specialty dives focusing on deep, night, peak performance buoyancy, underwater navigation, and underwater naturalist.

**Rules & Requirements**

**Requisites:** Prerequisite, PHYA 227.

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

**PHYA 438. Advanced Tennis. 1 Credits.**

Individual skill improvement in all shots with pace and accuracy of shots is stressed. Advanced strategies for singles and doubles play are learned. Analysis of opponent's strengths and weaknesses and physical fitness are stressed through drills and games.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 4 total credits. 4 total completions.

**Grading Status:** Letter grade; credit hours may not be used toward degree.

## Contact Information

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