

# KINESIOLOGY AND SPORT SCIENCES

## Dept. Code: KIN

The School of Education and Human Development offers undergraduate studies in the Kinesiology and Sport Sciences Department. The Department provides some of the strongest programs in the field, providing a structured classroom setting immersed in theory and knowledge with clinical and practical experiences. The department is committed to fostering unique and collaborative efforts within our diverse University community. Students are encouraged to engage in various work and clinical experiences including opportunities at the Medical School, the Miami Project to cure paralysis, UM Varsity Athletics Department, South Florida sports industry, Sports Medicine Clinics, Veterans Administration Hospital, and local high schools. Students can choose to major in one of the following areas:

- Athletic Training
- Exercise Physiology (with a pre-medical or pre-physical therapy track)
- Sport Administration

## Bachelor of Science in Education

I. Candidates for B.S.Ed. in the School of Education and Human Development must complete the credit hours of work and achieve the quality point average specified for students in the University at large as stated in the section ACADEMIC REGULATIONS AND PROCEDURES, subject to regulations concerning the major specified in departmental and program sections of this Bulletin. Exempted is interpreted to refer exclusively to those exemptions provided under the following headings:

- Advanced Standing and Placement (Credit Hour Granted);
- Credit by Examination;
- Advanced Placement (by proficiency examination);
- Statement of Foreign Language Requirements;

II. Except where a required course is one designated to correct a deficiency in his/her college preparation, the student may apply the credit hours of any required course from which he is exempted toward the credit hours specified for that subject as a general requirement for graduation and, upon payment of a recording fee, toward the 120 credit hours required for graduation. (See Departmental Proficiency Examinations.) An exemption may be granted for ENG 105, but these credit hours may not be applied toward the 120 credit hours required for graduation.

### III. Credit Only

Only free electives may be taken under this option. Courses which satisfy the major, minor, the distributions of the School, the General Education Requirements of the University or any course for which a C or better is required may not be taken for credit only.

IV. Transferred credit hour may not count toward the completion of a major without the written approval of the Assistant Dean of the School of Education and Human Development.

### V. Required Areas of Study.

#### 1. English Composition

Students must take ENG 105 and ENG 106 (or their equivalent) during the first year of enrollment in the School. Admission to ENG 105

requires a placement score acceptable to the Department of English. Students whose placement scores are deemed unacceptably low will be required to take the non-credit course, ENG 103, before taking ENG 105 and ENG 106. Students whose placement scores are high may be exempt from ENG 105 but not from ENG 106 or its equivalent.

#### 2. Mathematics

B.S.Ed. degree candidates must complete MTH 113 or higher. Students who do not place directly into MTH 113 must enroll in either MTH 099 or MTH 101 based on results of placement tests. Statistics does not satisfy the Math requirement. B.S. in Athletic Training and B.S. in Exercise Physiology have different Math requirements. Please see specific program requirements.

#### 3. Foreign Languages (applicable to Sport Administration majors only)

Students must earn at least 3 credit hours of a foreign language at the 200 course level or higher. Special 200-level courses are required of native speakers who choose to fulfill the language requirement. Two semesters of American Sign Language constitutes an acceptable alternative for the Foreign Language Requirement.

### Areas of Knowledge and Cognate Requirements

The University of Miami's General Education requirements ensure that graduates have acquired essential intellectual skills and have engaged a range of academic disciplines. All new students will fulfill the General Education requirements by selecting a **Cognate**, which is a cluster of courses arranged by their content, field and interest.

- A cognate is a group of at least three related courses for at least 9 credit hours.
- The courses in a cognate are related in a topical, thematic, interdisciplinary, sequential, or other such fashion, so that completion of a cognate provides coherent depth of knowledge in the area.
- Students must take three cognates to fulfill the Areas of Knowledge requirement,
  - one in the **Arts & Humanities (A&H)**,
  - one in **People & Society (P&S)**, and
  - one in **Science, Technology, Engineering & Mathematics (STEM)**.
- Each cognate has course options that allow students to complete the cognate in ways that meet their individual interests, while staying within the coherent focus of the cognate.
- In addition to the cognates that have been designed by faculty, each major and minor fulfills the cognate requirement in one area.
  - Exercise Physiology and Athletic Training majors will fulfill the **STEM** cognate.
  - Sport Administration, Human and Social Development, and Elementary/ESE majors will fulfill the **P&S** cognate.
- An approved list of cognates can be found on the University of Miami website.

### VI. Advanced Writing and Communication Requirement

Every student majoring in a program from the Kinesiology and Sport Sciences Department will meet the Advanced Writing and Communication Requirement upon fulfillment of the courses for that major. These courses have a prerequisite of ENG 105 and ENG 106 and will be identified as either writing intensive or as an oral/verbal communication proficiency course or both. Digital competency for both written and oral components will be assessed. Writing intensive courses require a minimum of 2500 written words; assignments will be assessed for analytical ability, synthesis of information, grammar,

content and style. Courses designated as an oral/verbal proficiency class will provide students an opportunity to demonstrate their presentation skills using accurate standard English structure and syntax, non-verbal cues and gestures, as well as audience appropriate language. The following courses meet the Advanced Writing and Communication Skills Requirement for the major:

Athletic Training: KIN 250 and KIN 260

Exercise Physiology: KIN 365 and KIN 457

Sport Administration: KIN 308 and KIN 498

## VII. Majors

Every candidate for the B.S. Athletic Training degree must choose Athletic Training as a major. Every candidate for the B.S. EXPH degree must choose Exercise Physiology as a major. Every candidate for the B.S. Ed. degree must choose a major in Sport Administration. To find the requirements for the major, consult this Bulletin under the discipline concerned, and confer with the designated departmental representative.

The choice of majors should be made no later than the beginning of the junior year and must be approved by the major department. Any student making unsatisfactory progress in a major may be required to change his/her major or to relinquish candidacy for the degree.

## VIII. Minors

B.S. Ed. majors in Sport Administration and Exercise Physiology and B.S. EXPH majors are required to declare a minor. Sport Administration students require department approval before declaring a minor. Exercise Physiology students may choose not to declare a minor if following the pre-med track. Students must complete all of the pre-med courses in order to be waived from the minor requirement. Please consult an advisor for clarification of this requirement.

Athletic Training majors are not required to have a minor.

## IX. Electives

Electives may be chosen from any courses offered by the University. The student should consult an advisor before selecting elective courses. At least 6 credit hours must be at the 300 level or above.

## X. Senior Assessment

Seniors are required to participate in the General Education Assessment prior to graduation as part of the SACS review process.

# Minors

A minor in any of the three areas below consists of 14-15 credit hours:

Exercise Physiology

Sport Administration

Sports Medicine

- A grade of C or better is required for each course applied toward the minor; the overall grade point average for the minor must be 2.5 or above.
- The undergraduate coursework in Exercise Physiology, Sports Medicine, and Sport Administration are open to all qualified University

of Miami students. A student can minor in *either* Exercise Physiology or Sports Medicine but not both.

- Athletic Training majors are not allowed to minor in Sports Medicine.
- Determination for using these courses as a minor, as a specialization, and/or as electives in any program, is made by the individual student's degree granting college or school.
- Seniors are required to participate in the General Education Assessment as part of the SACS review process.

For further information, address all inquiries to:

Associate Dean  
School of Education and Human Development  
P. O. Box 248065  
University of Miami  
Coral Gables, Florida 33124  
Telephone: (305) 284-3711

### **KIN 100. Leadership, Management, and Ethics in Sports. 3 Credit Hours.**

Students will gain an understanding of skills and philosophies of leadership, management, and ethic necessary for a position in the sport industry.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

### **KIN 105. Introduction to Athletic Training and Sports Medicine. 3 Credit Hours.**

In this practical, hands-on course, the students will learn to identify basic sport injuries that afflict the major joints of the body, and review basic methods to treat these injuries. The student will also learn how nutrition, improper biomechanics, and poor training can all impact sport performance. Plus, participants will be given the opportunity to learn and practice techniques or procedures (such as athletic taping or bracing) that may be useful in minimizing the incidence of injury.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

### **KIN 110. Explorations in Sports Medicine. 3 Credit Hours.**

This class will consist of an introduction to the field of Sports Medicine and Exercise Science. Basic information relevant to appropriate exercise prescription, proper nutritional habits, implications on health, longevity and performance will be addressed. Hands-on practical experiences will supplement theoretical concepts learned in the classroom setting.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

### **KIN 137. Introduction To The Theory, Application, And Practice Of Yoga. 2 Credit Hours.**

A critical examination of theories underlying yoga practice, benefits of different styles, using specific techniques to target practitioners' needs.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

**KIN 140. Introduction to Athletic Training. 2 Credit Hours.**

Introduction to the profession of athletic training. Introduction to Athletic Training with emphasis on study of the sports medicine team, legal concerns, nutrition, and pre-participation physicals. Course will discuss the basic principles of injury prevention including the role of conditioning, equipment, and protective padding. Emphasis will be familiarization with various community and university agencies, as well as the University of Miami athletic training staff, and policies and procedures used in the clinic/athletic facilities.

Corequisite: KIN 141. Prerequisite: Athletic Training, Pre-Athletic Training, and Sophomore Status.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 141. Introduction to Athletic Training Lab. 1 Credit Hour.**

Introduction to clinical athletic training for pre-athletic training major. Hands-on knowledge for the entry level athletic training student.

Observation hours in the athletic training room will give the student the opportunity to use the knowledge, skills, and techniques learned in this course. The student must complete 35 clinical observation hours. There is a \$65 lab fee for this class.

Corequisite: KIN 140. Prerequisite: ATHT, PAT Majors only and a Sophomore Status.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 145. Responding to Emergencies. 3 Credit Hours.**

Students will become familiar with accident, injury, and illness situations, techniques for immediate first aid, and legal parameters involved when administering emergency care. There is a \$45 lab fee for this class.

Prerequisite: ATHT Majors only and Sophomore Status.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 150. General Nutrition for Health and Performance. 3 Credit Hours.**

Fundamentals and theories of nutrition with a specific focus on nutrition for both sports and fitness.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 155. Biological Bases for Physical Activity and Health. 3 Credit Hours.**

This course serves as an introduction to the field of exercise physiology. Students will learn the biological need for physical activity, discuss specific mechanisms on how physical activity reduces disease risk and understand the relationship between physical activity and chronic diseases such as coronary heart disease, obesity, diabetes, cancer, aging and mental health.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 184. Athletic and Sport Injuries. 3 Credit Hours.**

Students will become familiar with athletic injuries in sports that occur over the principal joints in the body and the inclusion of anatomical structures that are frequently damaged. Basic operational treatments and rehabilitation programs after surgery will be discussed.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 200. Survey of Sports Administration. 3 Credit Hours.**

Students will examine the employment opportunities and skills needed in professional, collegiate, and amateur sports as well as the health and fitness industry.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

**KIN 201. Introduction to Sport Administration. 3 Credit Hours.**

Basic overview of the fields of sport management. Majors must receive a grade of B- or higher.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 202. Applied Nutrition for Health and Performance. 3 Credit Hours.**

The study of nutrition, diet analysis, biochemical processes in energy metabolism, nutrition and health problems, and nutrition as it relates to physical performance. The class will have 3 sections: 1) nutritional links to chronic disease; 2) nutrition before, during and after exercise bout; and 3) nutritional supplements for health and performance.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 203. Introduction to Gaming and Casino Management. 3 Credit Hours.**

The course will focus on the management of gaming and casino operations. Gambling has emerged as a major segment of the sport industry, comprising 10% of sport expenditures and injecting over \$20B annually into the economy. Students will be exposed to the managerial requirements and organizational structures of various gaming operations. They will also learn about the history of the gaming industry and its impact on the South Florida and the Caribbean economy. The course will provide an introductory level of knowledge regarding the managerial nuances which make working within the industry unique to the traditional sport business environments.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 206. Sport Facilities and Event Management. 3 Credit Hours.**

This course is an overview of the policy and procedures necessary to organize and develop sport events and facilities. In depth review of all programs, functions and procedures necessary for the operation of events and facilities are examined.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 210. Foundations in Athletic Training. 2 Credit Hours.**

Students will be introduced to the study of etiology and mechanisms of injury, pathology, and recognition of clinical signs and symptoms of athletic injury. The student must complete 50 clinical observation hours, which are required for the retention process of the Athletic Training Program.

Prerequisite: Sophomore Status or Higher.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 211. Introduction to Campus Recreation. 3 Credit Hours.**

This course is an introductory course and provides a broad overview of campus recreation. It will include information on how to plan, and execute programs such as intramurals, club sports and fitness and wellness. Risk management will be stressed in every aspect in the field along with other important topics such as sponsorships, budgeting, and evaluating programs and employees. Students will gain an understanding of what campus recreation is and its importance to a healthy lifestyle on campus.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 212. Elements of Sports Psychology. 3 Credit Hours.**

Introduction to the field of sport and exercise psychology by examination of psychological theories and research related to sport and exercise behavior.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 221. Exercise Physiology: Biochemistry & Skeletal Muscle. 3 Credit Hours.**

This course will offer an overview of the biochemistry pertaining to neuroendocrine responses, nutrition, and neuromuscular function; as well as the physiological and biochemical plasticity within skeletal muscle associated with various interventions, diseases, injuries, and aging. Majors must receive a grade of B- or higher.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 222. Exercise Physiology Laboratory Practicum: Neuromuscular. 3 Credit Hours.**

This course examines the nature of data collection in exercise physiology. Students will receive information on collection theory and its application to the measurement of a number of physiological systems during exercise. The course is designed to establish a clear linkage between the chronic and acute changes that occur during exercise and the laboratory methods that are used to assess those changes. Corequisite: KIN 221.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 230. Medical Terminology and Documentation. 1 Credit Hour.**

Terminology, note writing, and documentation techniques in sports medicine. A treatment cycle model will be introduced.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 232. Basic Human Physiology. 3 Credit Hours.**

This course presents a general overview of the major systems of the human organism with an examination of how they function in the human body. Majors must receive B- or higher.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 233. Basic Anatomy Lab. 2 Credit Hours.**

This course presents a general overview of the anatomy of the major body systems, such as the skeletal, muscular, cardiovascular, nervous, digestive, respiratory and reproductive systems as well as the integumentary system and special senses.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 234. Functional Human Anatomy. 3 Credit Hours.**

The study of human anatomy specifically for the sports medicine practitioner.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 235. Personal and Community Health. 3 Credit Hours.**

Overview of current strategies and practices for healthy living, including health maintenance and disease prevention.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 245. Kinesiology. 3 Credit Hours.**

Structure and function of Neurology, Osteology, Arthrology and Myology, with emphasis on the mechanics of the movement of the human body.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 250. Orthopedic Assessment: Lower Extremity. 3 Credit Hours.**

Common types of orthopedic/sports dysfunctions to the lower extremity will be discussed. Injuries will be discussed from the following viewpoints: etiology and mechanism of injury, pathology, recognition and evaluation techniques, protocols, and prevention.

Corequisite: KIN 251. Prerequisite: Athletic Training.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 251. Orthopedic Assessment: Lower Extremity Lab. 1 Credit Hour.**

Techniques used to evaluate orthopedic and sports injuries occurring to the lower extremity. The student must complete 100 clinical education hours. Clinical education hours will emphasize lower extremity orthopedic assessment, goniometry, manual muscle testing techniques, and gait evaluations.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 256. GLOBALIZATION OF SPORT. 3 Credit Hours.**

This course will address the intertwined relationship between globalization, sport, and development from a critical global perspective.

This course highlights the extent to which contemporary sport cultures are the result of an interplay between local and global forces. We

will explore the international character of professional and amateur sports including international competitions, league expansions beyond national boundaries, and the movement of athletes. Course topics include international sport organization, international competition, sport governance, international dispute resolution, international sports law, and new media.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 257. Research Experience in Exercise Physiology. 3 Credit Hours.**

This course provides students the opportunity to be immersed in the research process within the discipline of exercise physiology. This includes the entire research process starting with conceptualization of the study and proceeding through research design, implementation (assessment and equipment use), data handling, statistical analysis, and culminating in preparation of manuscripts or presentations.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 260. Orthopedic Assessment: Upper Extremity. 3 Credit Hours.**

Common types of orthopedic/sports dysfunctions to the upper extremity will be discussed. Injuries will be discussed from the following viewpoints: etiology and mechanism of injury, pathology, recognition and evaluation techniques, protocols, and prevention.

Corequisite: KIN 261. Prerequisite: KIN 251. Requisite: Athletic Training.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 261. Orthopedic Assessment: Upper Extremity Lab. 1 Credit Hour.**

Techniques used to evaluate orthopedic and sports injuries occurring to the upper extremity. The student must complete 100 clinical education hours. Clinical education hours will emphasize upper extremity orthopedic assessment, goniometry, and manual muscle testing techniques.

Corequisite: KIN 260.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 264. General Medical Conditions Evaluation. 2 Credit Hours.**

This class is the study of the clinical signs and symptoms of General Medical conditions that will present to the Certified Athletic Trainer. Emphasis will be placed on the techniques and instrumentation used for performing appropriate evaluation procedures.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 297. Practicum in Sport Administration. 1-3 Credit Hours.**

A comprehensive program of observation and supervised experience for one semester under the direction of a professional in the sports field. Supervised by Sport Administration program Internship Director. Course only open to Sport Administration Majors & Minors.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 301. Athletic Injuries & Sport First Aid. 3 Credit Hours.**

Course will help coaches, camp counselors, teachers, personal trainers, and athletes of all levels to fulfill the role of being a competent first responder to athletic injuries and illnesses. Upon completion of this course, students will have knowledge of basic sport first aid skills, anatomy and sport injury terminology, and knowledge of specific athletic injuries and illnesses. These will include head injuries, sudden illnesses, weather-related problems, upper and lower body musculoskeletal injuries, respiratory emergencies and illnesses, and internal injuries. Students will also learn basic hands-on skills such as splinting, taping, and bracing as it relates to preventing and treating athletic injuries.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 302. Sport Marketing. 3 Credit Hours.**

This course is designed as a marketing course that deals exclusively with Sport Marketing. Students are expected to develop comprehensive marketing and sponsorship plans. This course will require moderate to heavy computer knowledge. This course is designed to maximize the practical applications of marketing theory to the sport business environment.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 305. Careers in Sports. 3 Credit Hours.**

This course is designed to provide a basic overview of careers in the sports industry. Students will develop an understanding of the foundations of sport administration and various topics related to the professional growth within this field. The course will also provide basic fundamentals and skills to prepare students for potential employment within the sports world.

**Components:** DIL.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 306. Essential Leadership in Sports and the Professions. 3 Credit Hours.**

A variety of leadership and management skills will be examined, including communication, problem solving, conflict management, group dynamics, and leadership theory. Practical application to sport and allied professions will be included. Self-assessment opportunities and exercises will be utilized.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 308. Ethical Decision Making in Sport and the Professions. 3 Credit Hours.**

This course will examine ethical dilemmas in decision-making and other contemporary issues in sports management and campus and community environment. Real and hypothetical situations will be utilized. This course is a designated Upper Level Communication Requirement. Advanced written, digital and/or oral communication proficiencies will be emphasized in this course. Credit for ENG 105 and ENG 106 (or equivalent) is required for this course.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 310. Adolescent Growth and Maturation. 3 Credit Hours.**

This course is an in-depth study of pediatric exercise physiology with special emphasis on growth, maturation, physical activity, and performance. Topics include a comprehensive summary of biological growth and maturation, processes that impact physical performance. Additionally, students will learn the basis of training pediatric populations.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 321. Introduction to Systemic Exercise Physiology. 3 Credit Hours.**

The structure, function, and training of the cardiorespiratory system. Special emphasis on structural changes in the systems with exercise and their influence on cardiovascular performance, body composition, exercise efficiency and health.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 322. Exercise Physiology Laboratory Practicum: Cardiorespiratory. 3 Credit Hours.**

This course concentrates on collection of cardiorespiratory data. In addition, the application of these data to exercise prescription for specific athletic and non-athletic populations will be covered. Corequisite: ESS 321.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 330. Medical Terminology. 3 Credit Hours.**

Terminology, note writing, and documentation techniques in sports medicine/athletic training.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

**KIN 340. Strength and Conditioning. 3 Credit Hours.**

Introduction to Sport Specific Strength Training. Students will learn the practice of Olympic Weight Lifting and related exercise techniques.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 344. Gross Anatomy For Kinesiology And Sport Sciences. 3 Credit Hours.**

Human dissection of the major muscles, arteries and nerves of the body.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 345. Kinesiology. 3 Credit Hours.**

Structure and function of the skeletal, joint, and muscular systems, with emphasis on the mechanics of the movement of the human body and its relationship to sport and physical performance.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 365. Exercise Programming. 3 Credit Hours.**

This class is the study of the theory and principles behind the development of exercise programs. Students will learn how to accurately evaluate and develop individual exercise prescription based upon sound scientific research. Exercise prescriptions will be developed in accordance with the guidelines set forth by the National Strength and Conditioning Association and the American College of Sports Medicine. This course is a designated Upper Level Communication Requirement; Advanced written, digital and/or oral communication proficiencies will be emphasized in this course. Credit for ENG105 and ENG106 (or equivalent) is required for this course.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 366. Exercise Physiology Laboratory: Assessment. 3 Credit Hours.**

This lab course is designed to complement the ESS 365 lecture course (Principles of Exercise Prescription): Cardiovascular. Students will apply practical field assessments for body composition, aerobic capacity, muscular fitness, and joint range of motion, and will employ exercise strategies to improve each of the assessed fitness components. Students will also prescribe exercises to improve performance-based fitness, such as coordination, balance, agility, speed and power while learning proper exercise training techniques. Must be a declared Exercise Physiology (EXPH) major and receive a grade of "C" or better to satisfy requirements.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 370. Sociocultural Aspects of Athletic Training & Sports Medicine. 3 Credit Hours.**

Sports Medicine can produce the "perfect storm" of unique medical situations that lead to ethical dilemmas. This class will explore topics of professional and moral behavior, cultural competence, foundational behaviors of professional practice, and ethical decision-making in the fields of Athletic Training and Sports Medicine. Students will be required to read numerous case studies and novels that depict these issues.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 399. Neuromuscular Basis For Training. 3 Credit Hours.**

A critical examination of neuromuscular training techniques, their strengths, weaknesses and scientific bases.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 401. Legal Aspects of Sport. 3 Credit Hours.**

This course will focus on legal issues applicable to sport administration, including tort law, risk management, negligence, and constitutional law. Relevant legal cases and concepts will be incorporated.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 402. Sport Sponsorship and Promotion. 1-3 Credit Hours.**

This course is designed to provide a detailed examination of the relationship between sport and corporate sponsorship. Topics covered will include the theoretical premise of sponsorship, alignment marketing, strategic communication through sponsorship, determining the value of sponsorship, and evaluation of sponsorship activities. Perspectives from the property offering a sponsorship and from the organization functioning as the sponsor will be considered.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

**KIN 403. Sport Information Management. 3 Credit Hours.**

This course centers upon the development of those skills that are necessary for Sport Information Directors. Specifically, these traditionally include marketing, media, promotion, and public relations. This course hopes to provide detailed knowledge to allow the student to participate in these activities in a professional manner.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 405. Finance and Budget in Sport Administration. 3 Credit Hours.**

This course seeks to develop those financial skills necessary to understand a wide variety of financial concepts that impact sport managers. Such topics would include but not be limited to: Sport franchise value/valuations; economic impact of sport; risk-return models; financial statement analysis, and budgeting.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 410. Problems and Issues in Sport Administration. 3 Credit Hours.**

This course is designed as a seminar course. Topical issues in high school, collegiate and professional sport are presented and discussed in detail. A number of student-centered activities are introduced to aid in the development of the student.

Requisites: SPAD Majors and Senior Status.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 412. Psychophysiology. 3 Credit Hours.**

The study of the physiological effects of acute vs. chronic training on homeostatic function, musculoskeletal systems, energy system function, cardiovascular system, and the pulmonary system. Students will be able to understand and interpret terminology and research literature published in the field.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 415. Evidence Based Sports Medicine. 3 Credit Hours.**

This course will introduce the student to clinical epidemiology and the evaluation of the efficacy of prevention, diagnostic, and treatment strategies in athletic training and sport medicine.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 416. Research Methods in Exercise Physiology. 3 Credit Hours.**

This course will introduce the student to clinical epidemiology and the evaluation of the efficacy of prevention, diagnostic, and treatment strategies in exercise physiology and related professions.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 421. Advanced Systemic Exercise Physiology. 3 Credit Hours.**

This course examines the short and long term physical responses to exercise and provides a general overview of the field of exercise physiology with reference to the latest trends in modern physiological research.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 435. Clinical Biomechanics for Sport Medicine Professionals.. 3 Credit Hours.**

A lecture course stressing the biomechanics of joints and pathomechanics of orthopedic injuries.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Summer.

**KIN 443. Clinical Athletic Training Lab I. 2 Credit Hours.**

The application of athletic training practices in selected clinical education settings. The student must complete 150 hours of documented clinical education hours, which apply toward the graduation requirement of 1000 hours. Clinical education hours will emphasize emergency procedures, first aid, and protective equipment. Prerequisite: Successful completion of the retention process and formal admittance into the clinical portion of the Athletic Training Program. Students are required to return to campus for pre-season orientation prior to the start of the school year.

Requisite: ATHS Majors Only.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 444. Clinical Athletic Training Lab II. 2 Credit Hours.**

The application of athletic training practices in selected clinical and educational settings. The student must complete 150 hours of documented clinical education hours, which apply toward the graduation requirement of 1000 hours. Clinical education hours will emphasize general medical conditions, nutritional issues, psychosocial intervention, and injury prevention and risk management. Depending on the student's clinical education rotation, students may be required to start their clinical education hours prior to the start of the semester.

Prerequisite: KIN 443.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 455. Clinical Athletic Training Lab III. 2 Credit Hours.**

The application of athletic training practices in selected clinical and educational settings. The student must complete 150 hours of documented clinical education hours, which apply toward graduation requirement of 1000 hours. Clinical education hours will emphasize acute care of injuries and illnesses, lower extremity orthopedic assessment, and risk management and injury prevention. Students are required to return to campus for pre-season orientation prior to the start of the school year.

Prerequisite: KIN 444.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 456. Clinical Athletic Training Lab IV. 2 Credit Hours.**

The application of athletic training practices in selected clinical and educational settings. The student must complete 150 hours of documented clinical education hour. Clinical education hours will emphasize upper extremity orthopedic assessment, conditioning and rehabilitation, and therapeutic modalities. Depending on the student's clinical education rotation, students may be required to start their clinical education hours prior to the start of the semester.

Prerequisite: KIN 455.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 457. Practicum in Kinesiology and Sport Sciences. 1-3 Credit Hours.**

A comprehensive program of observation and supervised experience under the direction of a professional in the field for one semester. Supervised by University faculty. This course is a designated Upper Level Communication Requirement; Advanced written, digital and/or oral communication proficiencies will be emphasized in this course. Credit for ENG105 and ENG106 (or equivalent) is required for this course.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 458. Practicum in Kinesiology and Sport Sciences. 3 Credit Hours.**

A comprehensive program of supervised experience conducted under the direction of a professional in the field. Must culminate in research or hands-on experience conducted in the exercise science field.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 461. Therapeutic Modalities. 2 Credit Hours.**

Students will acquire the theoretical knowledge necessary for the clinical application of therapeutic modalities. Principles of electrophysics and biophysics, specific physiological effects and therapeutic indications and contraindications associated with cyotherapy, paraffin, ultrasound, electrotherapeutic and hydrotherapeutic modalities, intermittent compression, massage, and other contemporary modalities will be discussed.

Corequisite: KIN 462. Requisite: Athletic Training.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 462. Therapeutic Modalities Laboratory. 1 Credit Hour.**

This laboratory will help students apply the techniques and clinical skills related to the application of therapeutic modalities. Clinical education hours will give the student the opportunity to use the knowledge, skills, and techniques learned in this course. Students must complete 50 hours of documented clinical education hours.

Corequisite: KIN 461.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 463. Therapeutic Rehabilitation. 2 Credit Hours.**

Students will acquire the theoretical knowledge for the clinical application of a rehabilitation program, physical examination, principles of therapeutic exercise, open and closed chain exercise, muscle reeducation, and special therapeutic techniques such as aquatic therapy.

Corequisite: KIN 464. Requisite: Athletic Training.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 464. Therapeutic Rehabilitation Laboratory. 1 Credit Hour.**

This laboratory will place emphasis on the techniques and clinical skills relating to the rehabilitation of athletic injuries. Clinical education hours in a therapeutic rehabilitation facility will give the students the opportunity to use the knowledge, skills, and techniques learned in this course. The student must complete 100 hours of documented clinical education hours, which apply toward the clinical education requirement for graduation.

Corequisite: KIN 463.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 465. Pharmacology. 1 Credit Hour.**

Introduction to the basic principles of pharmaceutical intervention and the implications for rehabilitation as related to the Certified Athletic Trainer.

Requisite: ATHS Majors Only.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 470. Administrative Aspects of Athletic Training. 2 Credit Hours.**

Basic concepts of legal liability, budget, financial management, inventory control, facilities design and maintenance will be addressed. Additionally, the student will discuss the day to day supervision, scheduling and general administration of the athletic training facility.

Requisite: ATHS Majors Only.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 473. Sports Governance. 3 Credit Hours.**

This course provides the students with an examination of the governing organizations of sport at the youth, secondary, intercollegiate, professional, international, sport specific and olympic levels. In addition, policy development in sport management will be explored.

**Components:** LEC.

**Grading:** GRD.

**KIN 476. Seminar in Athletic training. 2 Credit Hours.**

Topics in Athletic Training with discussions covering the NATA competencies and objectives in written and oral practical formats.

Students will be required to register and take the BOC exam as a class requirement. Approx. cost \$350.00

**Components:** SEM.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 477. Advanced Nutrition for Health and Fitness. 3 Credit Hours.**

This course is an in-depth study of nutritional concerns of today's athlete. From dehydration to classic carbohydrate loading and from the Female Athlete Triad to ergogenic aids in sports, this course provides state of the art information on the latest nutritional issues for the exercising individual and for the athlete.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 488. Gross Anatomy. 3 Credit Hours.**

The essentials of Myology, Osteology, and Arthrology. Major nerves and arteries are also dissected. Many of the dissection areas are major injury sites in sports such as the knee, shoulder, elbow, neck and spinal areas.

There is a laboratory fee of \$100 required for this course.

Requisite: ATHS Majors Only.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 490. Special Topics In Kinesiology And Sports Sciences. 3 Credit Hours.**

This course is designed for students wishing to focus on a specific area of study within the umbrella of the field of Kinesiology. Students will be given supervision and support in a direction relevant to their needs and interests in a structured setting.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.



**KIN 491. Undergraduate Teaching Assistant Training in KIN. 1-3 Credit Hours.**

This course involves training and teaching assistant experience under the supervision of faculty. Students will have the opportunity to assist faculty and/or doctoral students in the teaching of clinical laboratory and/or undergraduate theory courses offered in the KIN department.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 492. Undergraduate Teaching Assistant Training in KIN II. 1-3 Credit Hours.**

This course involves training and teaching assistant experience under the supervision of faculty. Students will have the opportunity to assist faculty and/or doctoral students in the teaching of clinical laboratory and/or undergraduate theory courses offered in the KIN department.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 493. Undergraduate Research Assistant Training in KIN. 1-3 Credit Hours.**

This course entails research training for a specific topic in the areas of Kinesiology under the supervision of faculty. It will enable the student to understand the fundamentals of following up on a research question, setting up research design and following up with data collection for the purposes of acquiring clinical training and/or assisting in manuscript preparation.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 494. Undergraduate Research Assistant Training in KIN II. 1-3 Credit Hours.**

This course entails research training for a specific topic in the areas of Kinesiology under the supervision of faculty. It will enable the student to understand the fundamentals of following up on a research question, setting up research design and following up with data collection for the purposes of acquiring clinical training and/or assisting in manuscript preparation.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 495. Individual Study. 1-3 Credit Hours.**

The Application for Admission to Advanced Individual Study Form will be required.

**Components:** THI.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 496. Individual Study. 1-3 Credit Hours.**

The Application for Admission to Advanced Individual Study Form will be required.

**Components:** THI.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 497. Internship in Sport Administration. 1-9 Credit Hours.**

KIN 497: Internship in Sport Administration Filed Experience that requires the student to participate in the work environment (Formally ESS 497).

Requisites: SPAD Majors and Senior Status.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 498. Seminar in Sport Administration. 3 Credit Hours.**

Professional seminar to accompany internship in sport administration. Students will be required to interact with other internship students and supervisors on a regular basis and additionally, students will be required to submit comprehensive reports regarding their internship experiences. This course is a designated Upper Level Communication Requirement; Advanced written, digital and/or oral communication proficiencies will be emphasized in this course. Credit for ENG105 and ENG106 (or equivalent) is required for this course.

Requisites: SPAD Majors and Senior Status.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 502. Sport Sponsorship and Promotion. 1-3 Credit Hours.**

This course is designed to provide a detailed examination of the relationship between sport and corporate sponsorship. Topics covered will include the theoretical premise of sponsorship, alignment marketing, strategic communication through sponsorship, sponsorship sales and service, determining the value of sponsorship, and evaluation of the Olympics will be examined in-depth. Objectives, risks, and benefits from the property or platform offering a sponsorship and from the sponsoring organization will be considered.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

**KIN 503. ADVANCED SPORT INFORMATION MANAGEMENT. 3 Credit Hours.**

This course examines the complex fields of sport communication. Students will investigate the unique, symbiotic relationship that exist between sport and the media; examine various theoretical framework (e.g., agenda set, hegemonic, uses and gratification, elaboration likelihood model) that are pertinent to developing an understanding of the sport/media complex.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Offered by Announcement Only.

**KIN 515. Nutrition Diet and Exercise. 3 Credit Hours.**

Students will learn the latest concepts in weight management, physical fitness, and healthy eating. They will be able to understand the complex interplay of carbohydrates, protein, fat, water, fiber, vitamins, and minerals in the nourishment of their body and overall well-being. They will also examine serious health issues such as the use/misuse of anabolic steroids, weight control, and eating disorders.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Summer.

**KIN 520. Cellular Exercise Physiology. 3 Credit Hours.**

The course examines Bioenergetics and Muscular Physiology in training and detraining. Topics include the energy systems and their functional application during exercise, muscle structure and function, cellular and sub-cellular modifications of organelles and contractile mechanisms as result of training and physiological bases of training techniques.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 521. Advanced Systemic Exercise Physiology. 3 Credit Hours.**

The study of the physiological effects of acute vs. chronic training on homeostatic function, musculoskeletal systems, energy system function, cardiovascular and the pulmonary systems. Students will be able to understand and interpret terminology and research literature published in the field.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 522. Basic Statistics in Kinesiology and Sport Sciences. 3 Credit Hours.**

Introduction to basic statistical techniques commonly used in the Exercise and Sport Sciences. Designed as a prerequisite for KIN 646 (Formally ESS 646).

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Summer.

**KIN 523. Athletic Training Techniques - Assessment. 3 Credit Hours.**

This course will introduce the basic concepts related to injury evaluation. With this information, and with the development of basic skills, the student should be able to form an impression of the nature of most musculoskeletal injuries.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 524. Athletic Training Techniques - Rehabilitation. 3 Credit Hours.**

This course will introduce theoretical concepts that must be understood in order to be able to rehabilitate a musculoskeletal injury. Regarding actual rehabilitation techniques, the emphasis will be on therapeutic exercise with only a brief introduction to therapeutic modalities.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 525. Advanced Kinesiology. 3 Credit Hours.**

In-depth study of the human skeletal and muscular systems with a focus on the mechanics of movement as related to physical activity, sports, and athletics.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 527. Community and Global Nutrition. 3 Credit Hours.**

This course is designed to provide an overview of nutritional issues & related aspects of infectious and chronic disease impacting the health and performance of athletes, individuals & groups domestically & globally. Economic and environmental issues which impact nutritional status and deficiency in the Western societies & third world countries will be addressed. An international and cultural perspective on food, eating behaviors and customs will be explored.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 530. Laboratory Techniques in Functional Evaluation of Skeletal Muscle. 3 Credit Hours.**

This course examines the theories of data collection and collection techniques used to evaluate musculo-skeletal and neuromuscular function. The application of both computerized and non-computerized collection systems for performance evaluation is covered. The course is also designed to establish a clear linkage between the acute and chronic musculo-skeletal and neuromuscular changes that occur during exercise and the laboratory methods used to assess those changes. Collection theory, musculoskeletal and neuromuscular function, methods of strength evaluation, anaerobic power testing, electromyography, and a number of other functional parameters will be discussed.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 531. Laboratory Experiences in Systemic Exercise Physiology. 3 Credit Hours.**

This course provides a laboratory assessment of physiological principles and theories learned in the classroom setting. Focus will be on systemic application to exercise as an acute or chronic stressor. Corequisite: ESS 521.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 532. Sports Injuries: Prevention and Treatment. 3 Credit Hours.**

Prevention, diagnosis, treatment and rehabilitation of sports injuries. Anatomical and Kinesiological application to sports injuries.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 534. Integrative & Functional Nutrition. 3 Credit Hours.**

This course will discuss integrative and functional medicine and how it emerged. This course will analyze the healthcare models that include personalized care and the whole-person perspective. In this course we will discuss various factors that influence disease including diet and nutrition, stress, activity level, pharmaceuticals and environmental pollutants. Alternative approaches to treatment will also be discussed.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 535. Clinical Biomechanics for Sport Medicine Professionals. 3 Credit Hours.**

A lecture course stressing biomechanics of joints and pathomechanics of orthopedic injuries.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Summer.

**KIN 536. Strength and Conditioning I. 3 Credit Hours.**

This course serves as the practical/technical foundation for major compound movements and Olympic lifts. It also provides comprehension of movement specific dynamic warm-ups, advanced stretching techniques, methods for identifying movement compensations and underlying issues as well as evaluating Olympic techniques. Due to the practical nature of the course, all the sections of this course are held in the Hecht Athletic Center (HAC).

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 537. Strength and Conditioning II. 3 Credit Hours.**

This course is the continuation of Strength and Conditioning I (KIN 536). It provides more advanced Olympic weightlifting techniques and ballistic training, alongside a continued focus on corrective exercises to ensure a reduced risk of injury. The course also provides an introduction to exercise programming including specialized training techniques for athletic development. Due to the practical nature of the course, all sections of this course are held in the Hecht Athletic Center (HAC).

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 538. Nutrition during the Lifecycle. 3 Credit Hours.**

This course is designed to examine the changes in nutrition requirements during the life cycle, particularly as related to growth, development and aging. Psychosocial, cultural, and economic issues related to food intake at various life stages will be reviewed.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 539. Dietary Supplements And Human Performance. 3 Credit Hours.**

Evidence-based examination of supplements, food phytochemicals, and their relation to disease & performance.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 540. Exercise Psychobiology. 3 Credit Hours.**

This course is designed primarily for graduate level Exercise and Sport science students who are interested in the biochemical basis of personality as affected by exercise and sport. The course involves interdisciplinary integration and comprehensive reviews of ancient and current literature dealing with exercise, stress, emotional, personality, immune system function and neuroendocrine function.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 541. Neurophysiology in Exercise Science. 3 Credit Hours.**

Examination of the functions of the central, peripheral, and autonomic nervous systems in regulating exercise homeostasis and the structural and functional modifications to the systems through training. NOTE: This course is a writing intensive course. This means that all examinations and papers include a critical evaluation of the student's ability to convey information using the written word.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 542. STRENGTH AND CONDITIONING. 3 Credit Hours.**

A comprehensive overview of strength and conditioning.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 543. Professional Training and Counseling for Intergrative Health. 3 Credit Hours.**

Students will learn the integrative health care model, theories, behavior change models, approaches & techniques used in nutritional counseling to help athletes, individuals and groups implement and sustain behaviors, lifestyles, and attitudes to achieve optimal health. Lecture & personal application will allow for the development of skills in each of these areas.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 545. Special Sport Populations. 3 Credit Hours.**

This course presents an in-depth examination of chronic conditions and medical problems commonly observed in athletes. Students will learn about the etiology of the medical condition, how exercise affects the condition, and the most recent therapeutic treatments prescribed for the condition.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 546. Elite Conditioning I. 3 Credit Hours.**

Elite Conditioning I provides an introduction to evaluation techniques catered specifically to the athletic population including tests for strength, power, speed, agility, balance and stability. The course also provides instruction on how to apply these evaluations to their respective sports/positions. These evaluation techniques provide data that students will use in the process of corrective exercise prescription. Students are taught how to implement corrective strategies to improve athletic performance. Due to the practical nature of the course, all sections of this course are held in the Hecht Athletic Center(HAC).

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 547. Elite Conditioning II. 3 Credit Hours.**

Elite Conditioning II is the continuation of Elite Conditioning I (KIN 546). This course provides students with an understanding of the design and implementation of periodized conditioning programs for athletes based on the testing, evaluation, and applications to specific sports learned in Elite Conditioning I. The course focuses on speed agility and quickness for sports. It also includes practical implementation of ballistic, plyometric, speed, and conditioning drills emphasizing evidence based methods and training techniques. Due to the practical nature of the course, all sections of this course are held in Hecht Athletic Center(HAC).

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 549. Nutrition Assessment and Lab. 3 Credit Hours.**

Application of the principles of normal and therapeutic nutrition, nutrition assessment, evaluation and intervention as related to sports performance and the management and treatment of disease states. Laboratories will allow for the development of skills in each of these areas.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 550. Nutrition Biochemistry. 3 Credit Hours.**

To learn the fundamental biochemical structure and pathways governing nutrient intake and utilization. Students will learn how major forms of nutrients (macronutrients, vitamins, minerals and trace elements) are processed and utilized by different organs with a particular emphasis on muscle metabolism. Students will also learn how to relate their newly acquired knowledge to health and disease outcomes with focus on lifestyle disease related to metabolism such as diabetes and obesity.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 555. Medical Nutrition Therapy. 3 Credit Hours.**

The role of nutrition in the prevention and treatment of various disease states including diabetes, cardiovascular disorders, endocrine and gastrointestinal disorders, enteral feeding, renal disease, cancer and AIDS/HIV, and weight management. This course instructs on the use of the Nutrition Care Process for assessment and documentation.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 557. Diagnostic Imaging Techniques In Sports Medicine. 3 Credit Hours.**

This course is designed as an elective for undergraduate KIN students or graduate students. The basic physics of radiological imaging will be covered including radiology, fluoroscopy, CT scan, ultrasound, MRI, and nuclear medicine including image archiving. Normal anatomy will be compared to the corresponding radiographic anatomy. Common sports injuries will be evaluated by multiple radiographic modalities and will be correlated with the clinical condition. Discussion will include bony pathology as well as soft tissues such as ligaments, tendons, and menisci.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 561. Facility Management. 3 Credit Hours.**

Facility management provides students with an understanding of fitness entrepreneurship, giving students a comprehensive understanding of the, laws, regulations, policies, and work involved in setting up a fitness facility such as a gym, wellness center, or athletic training center. Students are responsible for developing a viable sports or fitness complex including all aspects of administrative and facility management.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 562. Fiscal Management in Sport Administration. 3 Credit Hours.**

Fiscal management as related to athletic sports administration, recreation and leisure sports administration, and physical education.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 563. Facilities and Event Management. 3 Credit Hours.**

This course is designed to introduce students to principles and practices of planning, funding and managing facilities associated with sports participation including professional sport venues, college sports, parks, recreational sport and health/fitness clubs. Students will gain an understanding of promoting, marketing, and maintaining sport facilities.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 564. Principles of Sport Marketing. 3 Credit Hours.**

This course will focus on the vast world of sports marketing. The basic principles of marketing and marketing management will be introduced and integrated with application of these principles to sport and sports-related organizations.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 565. Legal Aspects of Sports and Exercise Science. 3 Credit Hours.**

Legal liability, personal injury, negligence and other related legal aspects of sports and exercise science.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 566. Organization and Administration of Sports Programs. 3 Credit Hours.**

Administrative and organizational procedures and problems specific to athletic administration, recreation and leisure sports administration, and physical education.

**Components:** DIL.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 567. Elements of Sports Psychology. 3 Credit Hours.**

Introduction to the study of sport and exercise psychology including theory, current research and practical application.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 568. Developmental Sports Psychology. 3 Credit Hours.**

Examination of the concept of sport psychology which includes but is not limited to performance, enhancement, student performance and academic application.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Offered by Announcement Only.

**KIN 569. The Foundations of Exercise Prescription. 3 Credit Hours.**

Students will learn various assessments of Health and Wellness, and discover how to most effectively prescribe exercise strategies to treat the diagnosed needs of an individual.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 570. Advanced Programming. 3 Credit Hours.**

Advanced programming allows students to dissect sports by movement, metabolism and limitation. The course investigates current trends and evidenced based applications of specific training techniques for optimal sport performance. Students will perform complete sports analysis and develop periodized programs for major sports.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 571. Sport Industry in South Florida. 3 Credit Hours.**

This course will examine the various sport based organizations/events that are part of the sport industry in South Florida. Study of these organizations/events will include (a) products/services produced, (b) organizational structure, (c) economic impact on the local community, (d) key management personnel, (e) physical facilities, and (f) internship/employment opportunities.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 572. Creative Approaches to Problem Solving and Conflict Management. 3 Credit Hours.**

This hands-on course will examine the concepts of problem solving and conflict management from both personal and organizational perspectives. Students will have the opportunity to study in-depth both of these concepts (and the relationship between them) through a combination of lecture, theory, individual and group activities, readings, practical exercises, and self-assessment tools.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 574. Ethical Decision Making in Sports and the Professions. 3 Credit Hours.**

This course will examine ethical decision-making in a variety of environments with an emphasis on sport professions. Real and hypothetical situations will be utilized, and the course will combine theory with practical application. The case method in sport ethics will be incorporated.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 575. Essential Leadership in Sport and the Professions. 3 Credit Hours.**

This course will examine the concept of leadership as it pertains to sports and other professions. Various leadership and management skills will be included with a focus on practical applications in a work environment. Theory and self-assessment strategies will be incorporated.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 576. Practical Approach to Motivation and Ethical Decision Making. 1-3 Credit Hours.**

A critical study of practical problems of professionals in Exercise and Sport Sciences.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 577. Advanced Nutrition for Health and Fitness. 3 Credit Hours.**

This course presents an in-depth study of the nutritional concerns of today's Recreational and competitive athlete. Topics include dehydration, classic carbohydrate loading, protein needs, ergogenic aids, and more. State-of-the-art research in the field is provided. This is also a writing intensive course. Thus, writing skills will represent an integral part of one's grade.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 578. Pharmacology for Allied Health Professionals. 3 Credit Hours.**

The study of drug families and drugs in common use across spectra of age, illness, disease, and disability. Students will understand body systems treated with current pharmaceuticals over-the-counter (OTC) medications, and nutraceuticals. Actions, key adverse effects, and influences on individuals undergoing physical activity will be emphasized.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 579. Principles of Exercise Assessment: Cardiovascular. 3 Credit Hours.**

This course presents a comprehensive overview of the physical, physiological and metabolic responses of the human body to exercise testing and training both in health and disease. The successful student will gain an understanding of the process involved in prescribing safe and effective therapeutic exercise in healthy individuals as well as patients with heart and lung disease, diabetes and obesity. An overview of environmental and legal considerations in the prescriptive process will also be discussed.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 580. Principles of exercise Prescription: Neuromuscular. 3 Credit Hours.**

An examination of the scientific bases of modern training techniques designed to optimize performance, their functional application and potential impact on performance in sport and everyday activity.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 581. Development and Maturation of Athletes.. 3 Credit Hours.**

This course is an in-depth study of pediatric exercise physiology with special emphasis on growth, maturation, physical activity, and performance. Topics include a comprehensive summary of biological growth and maturation, processes as it impacts physical performance. Additionally, students will learn the bases of pediatric exercise physiology in order to understand the concepts of motor development, strength, aerobic and anaerobic performance in the pediatric population.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 584. Neurological Mechanisms of Metabolism and Weight Regulation. 3 Credit Hours.**

The focus of this course is on the integrative neurophysiological functions that regulate and influence obesity, metabolic disease, and inflammation. Students will be able to understand the role that chronic inflammation plays in the pathology of disease. A combination of lecture, critical reading, and group discussion will be utilized to explore the underlying basis for metabolic abnormalities.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.

**KIN 585. Advanced Topics in Kinesiology and Sport Sciences. 3 Credit Hours.**

This course will provide a synthesis of essential concepts in specialty subjects relevant to one's field of interest.

**Components:** THI.

**Grading:** GRD.

**Typically Offered:** Spring & Summer.

**KIN 586. Exercise Prescription/Assessment Laboratory. 3 Credit Hours.**

This course presents an overview of the laboratory techniques used to assess cardiovascular endurance and general fitness, pulmonary function and anaerobias observed during competition.

**Components:** LAB.

**Grading:** GRD.

**Typically Offered:** Fall.

**KIN 587. Laboratory Experience in Sports Nutrition. 3 Credit Hours.**

This laboratory class provides case study analyses and computerized nutrient analysis systems designed to evaluate nutrition and hydration needs of the recreational and competitive athlete. From urinalysis and blood work to body composition and computerized nutrient data base systems, this laboratory provides a clinical approach to evaluating the nutrition status of the exercising individual. Corequisite: ESS 577.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 588. Advanced Gross Anatomy In Kinesiology And Sport Sciences. 3 Credit Hours.**

Human dissection of the major muscles, arteries and nerves of the body. Course is held at the University of Miami, Medical Campus, cadaver laboratory. Special consideration is given to injury sites in sports such as the knee, shoulder, elbow, neck and spinal areas. Students are required to pay a \$100 laboratory fee for the class. This course is to be taken by undergraduate Athletic Training majors and for the 5- year Sports Medicine with a Concentration in Athletic Training program students only.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Spring.

**KIN 589. Directed Readings in Kinesiology and Sport Sciences. 3 Credit Hours.**

Directed Readings focusing on research and contemporary trends in the field.

**Components:** PRA.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 590. Special Topics in Kinesiology and Sport Sciences. 1-3 Credit Hours.**

This course is designed for students wishing to focus on a specific area of study within the umbrella of the Kinesiology and Sport Sciences curriculum. Students will be given supervision and support in a direction relevant to their needs and interests in a structured setting.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 595. Research Honors Project. 2 Credit Hours.**

This course has been designed for SEHD students who have been accepted into the Research Honors Program and are working with a faculty mentor.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 596. Research Honors Project. 2 Credit Hours.**

This course has been designed for SEHD students who have been accepted into the Research Honors Program and are working with a faculty mentor.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 597. Research Honors Project - Thesis Writing. 2 Credit Hours.**

This course has been designed for SEHD students who have been accepted into the Research Honors Program and are working with a faculty mentor.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 598. Research Honors Project - Seminar. 1 Credit Hour.**

Seminar section of School of Education & Human Development Research Honors Program. This seminar culminates with the presentation of your research at the Undergraduate Research, Creativity, and Innovation Forum (RCIF).

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall, Spring, & Summer.

**KIN 599. Advanced Programming for Endurance Athletes. 3 Credit Hours.**

This course provides students with training techniques to improve aerobic capacity, endurance, and lactate threshold for optimal performance. Students will review evidenced based principles of sports nutrition, strategies to ensure proper hydration, thermoregulation, and fuel (substrate) availability during prolonged exercise as well as develop programs for competitive sports including triathlon, marathon, and cycling.

**Components:** LEC.

**Grading:** GRD.

**Typically Offered:** Fall & Spring.