Sports and Health (SPHS)

SPHS500 Statistics for Sports and Health Sciences (3 semester hours)
This course will introduce the student to graphical presentation of data, histograms and confidence intervals for binomial probabilities. One-sample and two-sample t-test as well as regression and correlation with two variables will also be discussed. The student will learn the concept of hypothesis testing and confidence intervals, multivariate regression and correlation, partial correlation coefficients, analysis of variance and covariance and multiple comparison procedures. The analysis of research data will be emphasized in this course to provide the student with real world examples in the field of Sports and Health Sciences.

SPHS501 Advanced Exercise and Sport Physiology (3 semester hours)
Designed for learners involved in the fields of health and exercise science, this course surveys and critically evaluates the basic principles of human physiology with direct application to acute and chronic exercise. Particular attention is paid to lifestyle risk factors that can lead to heart disease.

SPHS502 Motor Learning (3 semester hours)
An evaluation of the physical, physiological, and psychological factors that affect motor skill acquisition, performance, retention, and transfer. With a focus on voluntary movement, topics include nervous system control of movement, sensory and perceptual contributions to motor learning, information processing, optimal conditions for learning motor skills, preferred modes of feedback delivery during learning, and individual variability in motor skill acquisition. Students will apply the principles of motor learning to coaching, fitness, and rehabilitation settings. Additionally, they will analyze motor learning settings and determine adjustments to be made in those settings to foster motor skill acquisition for a variety of populations.

SPHS503 Nutrition for Sports Performance (3 semester hours)
Nutrition plays an integral part of our daily lives. It becomes even more important for athletes, who push the physical limits of their body. Providing adequate fuel is essential and can make a difference between success and failure. Yet most athletes and coaches lack basic nutrition knowledge important for enhancing strength, speed and endurance. This class will focus on the nutritional needs and requirement of athletes. First, the student will recognize and establish sound nutrition principles and the nutrients that play a role in determining these principles. Nutrients and other food constituents are integrated into the human body. These affect the athlete’s metabolism, health, and performance. The student will trace the metabolic fate of dietary components and recognize how each nutrient and/or food constituent affects metabolism, health and performance. Using this knowledge, the student will design several healthy diets that optimize performance. (Prerequisite: SPHS502)

SPHS504 Advanced Methods of Strength and Conditioning (3 semester hours)
This course is designed to introduce the student to theoretical and practical concepts of strength exercise assessment, strength exercise interpretation and strength exercise prescription. Current research on strength training and methods is incorporated into the classroom for analysis and application. The student will develop appropriate techniques and methods used to recommend strength exercise prescription and programming for healthy and unhealthy clients. (Prerequisite: SPHS501)

SPHS505 Sport Psychology (3 semester hours)
Sport Psychology is the scientific study of how individuals behave in sport and exercise, and the practical application of that knowledge to performance enhancement strategies. Students in this course will investigate human behavior patterns in sports and exercise settings. Human behavior is complex, dynamic, and social. There are no easy answers when you try to determine why people behave in a certain fashion. However, this course will focus on interpreting and applying fundamental behavioral tendencies related to biological and psychological models of personality structure, motivational orientations, psychological interventions, and social dynamics. In addition, students will create useful psychological interventions that demonstrate their ability to distinguish the need for normal sport enhancement strategies from serious psycho/physical behaviors that require other professionally trained experts. Psycho/social relationships to sport performance will be analyzed. Behavior management strategies, modeling, aggression, and group dynamic models will be critiqued as students design philosophies that guide training and intervention strategies.

SPHS506 Essentials of Human Performance and Exercise Science (3 semester hours)
This course is designed to introduce the student to theoretical and practical concepts of exercise assessment, exercise interpretation and exercise prescription. The student will develop appropriate techniques used to recommend exercise prescription for healthy and unhealthy clients. (Prerequisite: SPHS501)

SPHS507 Advanced Biomechanics (3 semester hours)
The purpose of this course is to provide the student with an understanding, appreciation, and ability to analyze human movement using a biomechanics approach. This course will expose the student to the laws and principles governing human motion. Emphasis will be placed on the analysis of exercise and sport movements. Research with applications to a variety of sport, exercise, and clinical settings will also be included to provide the student with knowledge of current topics of interest in the field.
SPHS508 Current Topics in Exercise Science and Human Performance (3 semester hours)
Contemporary research related to wide variety of areas related exercise science and human performance are discussed and explored in this course. Students discuss relevant issues facing society regarding exercise, fitness, athletic performance, kinematic movement, motor development, and biomechanical analysis. The course challenges students to analyze and synthesize current and relevant topics and offer solutions to benefit exercise science research and related industries. (Prerequisite: SPHS501 and SPHS503)

SPHS509 Optimal Sports Performance (3 semester hours)
This course is designed to provide an understanding of postural assessment and integrated performance profile as it relates to human performance. This course will focus on identifying and correcting musculoskeletal abnormalities and performing integrate performance assessments. The student will develop appropriate techniques used to recommend exercise prescription for individuals post assessments. This course incorporates advanced sports performance assessments and exercise techniques utilizing the Optimum Performance Training Model (OPT Model) and prepares students for the Performance Enhancement Specialist examination offered by the National Academy of Sports Medicine (NASM-PES). Prerequisite: SPHS501.

SPHS510 Ethical and Leadership Principles of Health and Wellness Management (3 semester hours)
This course investigates methods, principles, leadership skills, and ethical decision-making responsibilities of professionals in the field of health and wellness. Readings, interactive tools, discussions, and independent activities provide students opportunities to equip themselves with skills in management, communication, team building, and personal and professional growth. Students apply these skills by taking on ethical and leadership opportunities that shape health and wellness principles and practice. This course provides practical tools they can use to approach leadership roles and ethical decisions that are implicit within health and wellness management. (Prerequisite: SPHS501)

SPHS511 Critical Thinking in the Sports and Health Industries (3 semester hours)
Critical Thinking in the Sports and Health Industries course will prepare both Sports Management and Sports and Health Science graduate student to address issues associated with critical thinking and Sports and will be the new required first course in their program. Students will be afforded the opportunity to begin to compile artifacts and signature assignments related to their field of study of Sports Management or Sports and Health Sciences. The course is intended to provide a foundation from which the student may use the knowledge and practices gained in this course throughout the rest of their graduate program.

SPHS520 Current Topics in Health and Wellness Management (3 semester hours)
This course appraises contemporary topics, concepts, principles, and theories affecting health and wellness dimensions relative to our culture and global population. Topics include disease treatment and prevention, nutrition, exercise and fitness, stress management, personal safety, and special populations. Students will explore current issues impacting personal health and wellness across society and generate strategies designed for improving quality of life and developing a healthy lifestyle for a widespread population. (Prerequisite: SPHS501 and SPHS503)

SPHS530 Program Design for Health and Wellness Management (3 semester hours)
This course examines administration aspects of health and wellness program design. Students learn to assess, develop, implement, evaluate, and modify health and wellness programs. Strategies for improving muscular strength, endurance, and weight-loss will be critiqued. Program design tactics and appropriate rates of progression will be analyzed for beginners and adult populations. (Prerequisite: SPHS501 and SPHS503)

SPHS540 Health and Wellness Coaching and Behavior Change (3 semester hours)
This course examines a range of health related coaching skills including observation, active listening, asking the right questions, and motivating clients to facilitate changes toward health and fitness goals. Students explore coaching strategies for various health and wellness professional settings such as corporate wellness and health promotion, community health organizations, personal training, senior adult, and clients with lifestyle-related diseases. Competencies in health and wellness coaching include building rapport with clients; helping clients identify goals, helping clients identify strategies for action plans geared toward reaching their goals, and building accountability measures to ensure compliance and success. (Prerequisite: SPHS501 and SPHS503)

SPHS697 Sports and Health Sciences Capstone (3 semester hours)
This course requires students to complete a culminating research project based from theories, research methods and analytical skills, and substantive knowledge obtained through their master’s curriculum in sports and health sciences. Research options involve concepts and applications covered throughout the student’s learning experience in the master’s curriculum; including bioenergetics of exercise and training, techniques in exercise, program design and prescription, and administration of testing and assessment of fitness, health, and wellness. NOTE: This course may not be taken until all other courses are COMPLETED and student has a 3.0 GPA.
SPHS698 Comprehensive Exam for Sports and Health Sciences (0 semester hours)

Comprehensive final examinations are for students in the Master of Sciences in Sports and Health Sciences. IMPORTANT: You must have COMPLETED all other courses in the program and have a GPA of 3.0 in order to register for this course. As a Sports and Health Sciences student, you must pass this comprehensive exam in order to have your degree conferred. The comprehensive exam must be taken by the course end date or a failing grade will be posted. If you fail your first course attempt to pass the comprehensive exam, you will need to get approval to register for a second attempt of the course and BOTH final course grades will show in your transcript.