## **KIN - KINESIOLOGY**

#### KIN 6000 Foundations in Kinesiology (3 Units)

This course provides an overview of the theory and applications in Kinesiology with specific emphasis on the exercise and sport sciences. Leadership, professionalism, and engagement in these disciplines from a Christian approach will be emphasized. Students will engage with the concept of incorporating exercise as preventive medicine. The course will also include an exploration and overview of laboratory procedures in each discipline and facilities tour (i.e. EMG, ultrasound, metabolic cart, movement screening, exercise testing). Students will formulate an initial research or capstone project idea as part of the MS degree, interfacing with program faculty and the university library to initially form and develop their research question or capstone project.

## KIN 6005 Research Methods (3 Units)

This course is an introduction to research methods to acquaint the student with analyzing the professional literature. The course will explore both quantitative and qualitative research methods, including descriptive and inferential statistics. Topics will include: 1) selected techniques and designs used in research, with special emphasis given to planning, conducting, and reporting of research; and 2) applied statistical analysis and interpretation of data from the field of exercise and sport science. Students will produce an original pilot research project proposal including preliminary statistical design.

## KIN 6007 Evidence-Based Practice and Research Methods (3 Units)

This course provides an introduction to research methods, including exploring quantitative, qualitative and mixed-methods approaches, to acquaint students with analyzing the professional literature. Students will practice the judicious use of current best evidence in making decisions about the care of individual patients and clients, as well as the development and delivery of integrative health programs and services. Students will learn to: ask a focused question to satisfy the health and wellness needs of a specific patient or client demographic; find the best evidence by searching the literature; critically appraise the literature; apply the results in professional practice; and evaluate the outcomes.

## KIN 6010 Evidence-Based Practice and Decision Making in Kinesiology (3 Units)

This course will enable students to practice the judicious use of current best evidence in making decisions about the care of individual patients and clients. Students will learn to integrate the best external evidence with their clinical expertise and patient concerns to: ask a focused question to satisfy the health needs of a specific patient; find the best evidence by searching the literature; critically appraise the literature; apply the results in clinical practice; and evaluate the outcomes in patients.

Online.

## KIN 6011 Managing Personnel, Facilities, and Events in Sports (3 Units)

This course will prepare sport professionals to plan athletic and fitness events, manage the personnel and facilities associated with these events and facilities, and design effective fitness and exercise programming. Students will be exposed to industry leading sport and fitness facilities and trends throughout the southern California region through periodical visits to these facilities. Contemporary issues in entrepreneurship in the sport and fitness industries will be addressed.

## KIN 6015 Biomechanical and Neurological Basis of Human Movement (3 Units)

Students will explore advanced concepts in biomechanics and motor control (neuromechanics). Topics will include muscle/tendon function and architecture, motion analysis, sensorimotor system architecture, reflex pathways and excitability, and postural control. A combination of lectures, group work, demonstrations, laboratory experiences and prescribed readings will be used within the course.

#### KIN 6017 Lifestyle Medicine and Integrative Health (3 Units)

This course provides an overview of paradigm shifts in healthcare, highlighting an increasingly integrative approach to medicine centered on treating the whole person- body, mind and spirit. Students will explore evidence-based lifestyle therapeutic interventions in areas such as stress management, nutrition, sleep, and physical activity in order to provide a multidimensional approach to well-being and health restoration.

## KIN 6020 Marketing, Promotion, and Public Relations in Sports (3 Units)

Students will explore and develop promotional and marketing strategies involved in the spectrum of the sport and fitness industries. Students will be equipped for the high school, collegiate and professional sport settings as well as personal, group, and comprehensive fitness facilities that promote a holistic approach to wellness.

## KIN 6025 Special Topics in Health, Exercise, and Sports Science (3 Units)

The topics of this course will alternate based on faculty expertise and student interest. Each topic will provide students with a unique opportunity to gain advanced specialization in an area of their choosing. Topics may include: Applied Function and Corrective Exercise; Health Equity and Social Justice; Movement Interventions for Aging, Disease Prevention and Health Promotion, and Electrocardiography and Interpretation.

KIN 6026 Sport and Exercise Nutrition for Peak Performance (3 Units) Students in the healthcare professions will learn the science of nutrition, including cellular biology, digestion, and metabolism of macronutrients and micronutrients, as well as the practical applications of coaching individual clients in nutrition to enhance performance.

KIN 6027 Behavior Change Models, Methods, and Theories (3 Units) This course examines widely accepted theories, models and methods for facilitating health behavior change. Topics include, but are not limited to, the transtheoretical model of behavioral change, self-determination theory, positive psychology, and motivational interviewing.

#### KIN 6030 Leadership in Sports (3 Units)

Both historical and contemporary aspects of leadership theory will be applied to various aspects of the sport industry, including post-secondary education, athletics administration, and the rapidly-growing business of sport.

# KIN 6035 Advanced Practice in Movement Interventions and Corrective Exercise (3 Units)

This course will provide the fitness professional with in-depth expertise in various movement interventions to improve function, eliminate pain and enhance performance. Emphasis will be placed on designing individualized strength training and corrective exercise programs, and utilizing movement screening during functional interventions.

#### KIN 6036 Clinical Exercise Testing and Interpretation (3 Units)

This course emphasizes advanced study of the theoretical basis for exercise testing and practical procedures involved with pre-exercise screening and exercise testing. The course prepares students to utilize scientific rationale to design, implement and supervise exercise programming for those with chronic diseases, conditions and/or physical dysfunctions beyond cardiovascular and pulmonary disease. Students will interpret information from screening and will apply this to appropriate exercise intervention protocols. Students will be prepared to pursue certification as an ACSM Registered Clinical Exercise Physiologist . Note: 600 hours of preceptor-supervised clinical experience are also required for ACSM certification.

## KIN 6037 Exercise and Nutrition for Health and Healing (3 Units)

This course evaluates the critical role that physical activity, exercise, and nutrition play in preventing and treating chronic diseases. Students will examine current research, established guidelines and best practices in order to design and deliver comprehensive lifestyle interventions that optimize health, healing, and well-being.

## KIN 6038 Clinical Exercise Physiology (3 Units)

This course provides a detailed analysis of the effects of exercise on the organ systems of the body. Lecture and laboratory experiences will be related to apparently healthy populations as well as those with obesity, diabetes and metabolic syndrome.

Letter grade.

## KIN 6040 Finance and Economics of Sports (3 Units)

This course will provide students with an introduction and relevant application of the economic principles that influence athletic, sport and fitness organizations. Students will discuss and implement budgeting, financial statements, economic impact analysis and other related topics.

## KIN 6045 Loaded Movement Training (3 Units)

This course explores the methodology of Loaded Movement Training (LMT). Students will explore how the body adapts to LMT from a neuro, mechanical, and metabolic perspective and justify the use of LMT in an exercise program. Students will gain knowledge on how to design exercise workouts and programs using Loaded Movement Training for Sport Performance.

## KIN 6046 Clinical Exercise Physiology and Metabolism (3 Units)

This course provides an advanced understanding of the clinical effects and physiologic adaptations of the human body to exercise interventions. The effects of exercise on the organ systems of the body will be explored through lecture and laboratory experiences with an emphasis toward combating obesity, diabetes, and metabolic syndrome. The clinical application of current research will occur in lab settings.

## KIN 6047 Integrative Health and Wellness Coaching (3 Units)

In this course, students will apply evidence-based behavior change strategies and effective communication techniques to facilitate patient-centered coaching interventions. Emphasis will be placed on the development and refinement of practical coaching skills in order to empower patients to enact meaningful and sustainable lifestyle changes. This course will also survey the current landscape and future opportunities within the evolving field of health and wellness coaching in order to prepare students for work in a variety of settings.

## KIN 6050 Research Project Seminar in Kinesiology (2 Units)

This course provides students with guidance in the research process to deepen knowledge in an area of their professional interest. Students will complete and present an original research project including preliminary statistical design, data collection, data analysis, and presentation of results.

#### KIN 6051 Seminar in Kinesiology (2 Units)

This course will engage students in relevant Kinesiology issues in order to solve current problems and lead future initiatives. Industry experts will be invited to present on a broad range of topics including sport and fitness entrepreneurship, faithful leadership, media and public relations, sport and fitness technology, corporate wellness, behavior change and other topics of interest to students.

## KIN 6056 Clinical Exercise Prescription (3 Units)

This course prepares students to utilize scientific rationale to design, implement and supervise exercise programming for patients with chronic diseases, conditions and/or physical dysfunctions of the cardiovascular, pulmonary, metabolic, musculoskeletal, neuromuscular, and immunologic systems. Students will be prepared to pursue certification as an ACSM Registered Clinical Exercise Physiologist. Note: 600 hours of preceptor-supervised clinical experience are also required for ACSM certification. **Prerequisite(s):** KIN 6036 or consent of instructor.

## KIN 6057 Wellness Entrepreneurship (3 Units)

This course provides health and wellness professionals with a practical framework for entrepreneurship, emphasizing key principles for business success. Students will develop and apply entrepreneurial knowledge and skills necessary to make informed professional decisions regarding starting a new entrepreneurial opportunity, joining an entrepreneurial endeavor, acquiring an established business or creating a new venture within an existing organization.

## KIN 6060 Directed Readings (1 Unit)

This course provides advanced study in the essential research of a specific discipline in Kinesiology. Fundamental skills in reading and evaluating research will be acquired, including examining research paradigms, critically appraising study design and findings, and determining the practical relevance of the results.

May be repeated for up to two (2) units.

Prerequisite(s): KIN 6005, KIN 6010 or equivalent.

## KIN 6065 Sport and Tactical Strength and Conditioning (3 Units)

This course will expose students to various methods and strategies in both sport and tactical strength and conditioning. Students will examine research and practice of different methods currently in use in the field and discussed in the literature on selected topics and demonstrate appropriate implementation of advanced training methods. Additionally, this course will refine the student's ability to construct an advanced training program designed to enhance performance in specific ways. The student will demonstrate the ability to critically analyze and alter a training program using an evidence-based approach.

## KIN 6067 Disruptive Health Technologies (3 Units)

This course evaluates effective uses of disruptive health technologies within the health and wellness industries to support long-term behavior change and improved well-being. Students will examine the science, design and real world application of these innovative technologies as an affordable and practical tool to deliver lifestyle interventions aimed at preventing and managing chronic disease.

## KIN 6077 Advanced Health and Wellness Coaching (1 Unit)

This course is specifically designed to deepen and refine the foundational health and wellness coaching skills developed in KIN 6047. Through case-based learning and real-world application, students will apply health and wellness coaching knowledge and skills in working with both individuals and groups. This course will also evaluate key considerations for designing and implementing integrative health and wellness coaching programs and services in a variety of professional settings.

#### KIN 6087 Mind-Body Medicine (3 Units)

This course explores the dynamic interplay between mind, body, and behavior. Students will examine how emotional, mental, social, and spiritual factors affect health and well-being. Emphasis will be placed on evaluating integrative health approaches to increase self-awareness, enhance self-care, and cultivate resilience in both patients and healthcare professionals.

## KIN 6088 Internship or Practicum in Kinesiology (1-3 Units)

The Internship or Practicum experience provides the student with practical knowledge and direct and relevant experience in their chosen discipline. Students may arrange the site(s) of internship or may inquire with their faculty advisor about opportunities in the San Diego region. Students can repeat KIN 6088 and are required to complete three (3) units total.

Prerequisite(s): Consent of instructor.

## KIN 6095 Comprehensive Examination (0 Units)

The comprehensive examination tests mastery of applied and theoretical concepts appropriate for the Master of Science degree. Exams consist of a one-day written exam (4-6 hours).

Prerequisite(s): Consent of instructor.

Fee: \$175

## KIN 6097 Applied Project in Integrative Wellness (2 Units)

This course provides students with guidance in developing an applied project to deepen knowledge in a health or wellness-related area of their professional interest. Students will create and present either an original wellness program, curriculum-based project, or wellness-focused business plan.

## KIN 6098 Capstone Project (3 Units)

This course provides an extended experience for the student to produce a final project on a specific topic of professional interest. Under the direction of a faculty advisor, the student will advance through the preparation and defense of a capstone project\*. This course aims to enable graduate students to gather and/or analyze data to advance their field and professional standing. The qualified student will have previously defended a project proposal successfully in KIN 6005.

**Prerequisite(s):** KIN 6005 or equivalent and consent of Program Director. **Fee:** \*If a student does not successfully defend their Capstone Project, a Program Extension Fee of \$745 will be charged to the student's account each semester until they complete the project.

## KIN 6099 Thesis (3 Units)

This course provides an extended research experience for the student in a specific topic of professional interest. Under the direction of a faculty advisor and thesis committee, and after completing KIN 6000 and KIN 6005, the student will conduct further empirical research and will advance through the preparation and defense of a thesis\*. Course Aim: This course aims to enable graduate students to conduct original research to advance their field and professional standing. The qualified student will have previously defended a thesis proposal successfully in KIN 6005.

**Prerequisite(s):** KIN 6005 or equivalent, KIN 6050, KIN 6060 or equivalent, and consent of Program Director.

**Fee:** \*If a student does not successfully defend their Capstone Project, a Program Extension Fee of \$745 will be charged to the student's account each semester until they complete the project.