

# **KINESIOLOGY**

## Programs Undergraduate

## **Majors**

- Exercise Science, B.S. (https://catalog.tulane.edu/professional-advancement/kinesiology/exercise-science-major/)
- · Health and Wellness, B.A. (https://catalog.tulane.edu/professional-advancement/kinesiology/health-wellness-major/)

## **Minors**

- Exercise Science Minor (https://catalog.tulane.edu/professional-advancement/kinesiology/exercise-science-minor/)
- · Health and Wellness Minor (https://catalog.tulane.edu/professional-advancement/kinesiology/health-wellness-minor/)

## Graduate

· Sport Studies, Master of Science (https://catalog.tulane.edu/professional-advancement/kinesiology/sport-studies-mpr/)

## Certificates

- Sport Administration Certificate (Graduate) (https://catalog.tulane.edu/professional-advancement/kinesiology/sport-administration-cert/)
- · Sport Coaching Certificate (Graduate) (https://catalog.tulane.edu/professional-advancement/kinesiology/sport-coaching-cert/)

# Courses Kinesiology (KINE)

## KINE 1400 Intro to Health Sciences (3)

This course offers a basic overview of human health. Topics to be addressed include the following: the historical development of public health and ways that health affects daily life; explain the basic principles of epidemiology, including rates, risk factors, disease determinants, causation and surveillance; explain the manner in which health information and communications can be used to improve health; identify how social and behavioral interventions affect health; explain how policy and law affect health; identify the impact of the environment; describe the manner in which communicable diseases affect health; and, describe the basic organization of health care and public health systems.

#### KINE 1500 Intro to Kinesiology (3)

This course will introduce students to the academic discipline of Kinesiology, including fundamental components of fitness & exercise, health & wellness and topics within sport/exercise science. Additional topics will include current issues in the field, and options for career and professional development.

## KINE 1800 Wellness in Contemporary Am (3)

A holistic approach to wellness is presented via the components of total fitness, e.g., physical, social, emotional, and intellectual. Emphasis is placed on behaviors that serve to prevent illness and injury rather than rehabilitative strategies that are implemented after the fact. Content addresses both theoretical and applied perspectives of wellness that should be used in developing personalized exercise programs and healthy lifestyles. Additional topics to be covered include (but are not limited to): strategies for optimal nutrition, global versus national health and fitness trends, comparative analysis of healthcare systems, alternative forms of preventive/rehabilitative medicine, and environmental impact on wellness.

## KINE 1940 Transfer Coursework (0-20)

Transfer Coursework at the 1000 level. Departmental approval may be required.

#### Maximum Hours: 99

## KINE 2010 Social Aspects of Health (3)

The course is designed to provide students with an overview of the theoretical and empirical bases of social aspects as applied to health sciences, so that students can both apply and communicate this material in the context of their health-related careers. This course explores the social and behavioral connections between health and health-related matters. The challenges/incentives are to promote health through societal and behavioral change.



#### KINE 2220 Mind/Body Health (3)

Health is influenced by physical, intellectual, social, spiritual and emotional determinants. In this course, the interaction of these determinants is explored as they relate to the prevention, onset, and progression of, and recovery from, disease. The aim is to provide an overview of the mind/body connection in relation to overall wellness using established theoretical and applied perspectives, e.g., cognitive behaviorism, psychoneuroimmunology, and guidelines for healthy lifestyles.

#### KINE 2230 Stress Management (3)

This course examines stress from psycho-physiological and behavioral perspectives. It will afford each student the opportunity to experience various strategies used in coping with stress, e.g., self-mastery, meditation, imagery, exercise, nutrition, and cognitive restructuring. Various theories are discussed that serve as the foundation for the understanding of and coping with everyday stressors as well as those that occur unexpectedly.

### KINE 2330 Nutrition and Behavior (3)

This course is intended to bridge the gap between the theory and practice of nutritional science. Emphasis is given to the basic food constituents and their physiological relationships within the body. Topics will include but not limited to: the fundamental principles of normal nutrition; the interactions between diet and energy expenditure; gender differences; changes in nutrient needs throughout the life cycle; computer-assisted nutritional analyses; and, web-based nutritional sites. Includes the investigation of optimal health, allergies, hyperactivity, hypoglycemia, learning disabilities, eating disorders, delinquency, mental disorders and senility as they pertain to nutritional practices.

#### KINE 2910 Independent Study (1-3)

Open to students with approval of Program chair. Student can work with a faculty member on an independent project.

#### KINE 3001 Special Topics (1-3)

Special Topics in Kinesiology.

#### KINE 3002 Special Topics (1-3)

Special Topics in Kinesiology.

#### KINE 3003 Special Topics (1-3)

Special Topics in Kinesiology.

#### KINE 3004 Special Topics (1-3)

Special Topics in Kinesiology.

#### KINE 3110 Exercise & Sport Psychology (3)

This course will examine the psychological and social-psychological antecedents and consequences of exercise, physical activity and sports participation. Emphasis will be on theory and research on personality, motivation, arousal, cognition, attributions, leadership, and group dynamics.

### KINE 3120 Biomechanics (4)

This course is designed to develop an understanding of the application of mechanical principles to human movement and methods of motion analysis.

#### KINE 3130 Lifespan Motor Development (3)

This course is designed to provide the student with a knowledge base in the study of changes in motor behavior across the lifespan, the process that underlie these changes, and factors that affect them.

## KINE 3200 The Human Body (3)

The understanding of the structure and functional significance of the human body is imperative for each individual to possess. The Human Body course will focus on such structural and functional significance with emphasis on the specific systems of the body, including but not limited to skeletal, muscular, neurological, endocrine, respiratory, reproductive, and integumentary systems. This course will cover an introduction to common illnesses/disease processes/injuries specific to each body system. Exercise, wellness, health, and sports performance will be topics of concentration as they relate to the body and its functions. The Human Body course also concentrates on environmental, ethical, and health issues related to the biology of humans.

#### KINE 3220 Global Health (3)

This course introduces students to critical issues in the current global health scene. Emphasis is placed on the main principles of global health, including an analysis of global health systems, diseases, programs, health governance and policies, identification and interpretation of current relevant data sources.

#### KINE 3250 Gender Based Issues in Health (3)

The course will explore health concepts as they apply to particular needs of men and women within the context of a gender-based health care system in the United States. The course will address epidemiological and sociological analysis of the major causes of morbidity and mortality on the basis of gender; impact of social and behavioral influences; relationship of social, economic, and political inequality trends based on gender.



#### KINE 3330 Epidemiology of Aging (3)

This course will introduce students to critical issues in the aging population. The course provides a comprehensive overview of the most important topics in health and aging, taking a "whole person" epidemiological approach to health, including attention to cultural differences, psychosocial, economic, and population factors affecting aging. The study of aging and health enhances professional opportunities in the fields of gerontology, wellness, and other medical and health related fields.

#### KINE 3500 Cultural Difference in Healing (3)

This course is designed to explore the impact of culture on the perception of health and illness, and how this translates into health-seeking behaviors and broader health systems. The course will present an anthropological view of health and illness through its various cultural markers, such as pain, stress, care vs. cure, diet, gender, doctor/patient relationships, mental health among others.

#### KINE 3600 Economics of Health & Wellness (3)

This course provides an introduction to the application of economic theory to the field of health and wellness. In particular, students will study the individual as a producer of health/wellness and as a consumer of healthcare services. Also, the role of physicians, hospitals, insurance providers, and the government in the health and medical care marketplace will be examined. Finally, the role of universal insurance and international comparisons of the efficiency and effectiveness of health care systems will be studied.

#### KINE 3650 Childhood Obesity (3)

This course will examine the prevalence and impact of obese conditions on disease development in childhood and adolescence. Students will analyze current evidence focused on interventions used in the behavior and clinical management of overweight and obese youth in community and clinical settings.

#### KINE 3910 Independent Study (1-3)

Students complete an independent project under the supervision of a faculty member. Approval is required by the Program Director.

#### KINE 4010 Catastrophic Illness & Injury (3)

This course reviews the many catastrophic diseases and epidemics that have ravaged human populations, past and present, and how societies have understood and responded to these challenges over time. Possible changes in social conventions, information sharing and healthcare practices which may be necessary to deal with current and future epidemics are discussed. Lessons learned from previous catastrophes may help to deal with future ones.

## KINE 4030 Exercise Physiology (4)

Basic human physiology with emphasis on the physiological changes associated with exercise and overload that affect the underlying function of cells and organ systems of the human body.

Prerequisite(s): (SCEN 2030 and 2035) and (SCEN 2040 and 2045).

#### KINE 4050 Mass Media and Health (3)

This course examines the effects of mass media on population health, from the negative impact of advertising of unhealthy products (e.g., cigarettes, alcohol and junk food), to the positive impact of public-health campaigns. Content includes an overview of behavioral science theory, themes and approaches to advertising, mass media prevention, and health promotion campaigns. Case studies of current media coverage and advertising campaigns will be used to demonstrate the effects of media on health and social behavior.

## KINE 4070 Motor Learning (3)

This course is an introduction to applied and basic theoretical aspects of motor learning as they apply to exercise science and related professions. It also includes a major hands-on component introducing the student to the experimental study of motor learning principles.

## KINE 4110 Sports Medicine (3)

This course will examine therapeutic modalities and the advanced care, prevention, and treatment of athletic injuries.

## KINE 4120 Strength & Conditioning (3)

This course will examine the development and evaluation of training principles and programs for diverse populations. Emphasis is placed on physiological adaptations and mechanical principles related to the application of resistance training.

## KINE 4150 Exercise Prescription (3)

This course presents students with the most current information on health-related physical fitness testing and exercise programming for individuals of all ages, fitness levels, and disease states.

Prerequisite(s): KINE 4030.



#### KINE 4200 Mental Health (3)

This course examines mental health issues in the context of social, environmental, governmental and legal conditions. Specific attention will be given to: identifying historical and current developments in mental health policy in the United States; explaining the significance of stigma in society regarding mental illness and how it affects individuals with mental illness; explaining the manner in which the legal system copes with the mentally ill; analyzing the etiology of some major mental illnesses (e.g., schizophrenia, bipolar disorder, eating disorders, PTSD, and childhood disorders) and how these disorders affect an individual's ability to function in society; identifying risk factors and protective factors related to mental disorders/ illness; identifying public health efforts for prevention and intervention of mental disorders in the U.S.; and, access to public health programs, support services, medication costs, and insurance coverage for those with mental illnesses/conditions.

#### KINE 4250 Environmental Health (3)

This course provides students with an introduction to scientific approaches to the investigation and modification of the effects of environmental factors on human health. Contributions of the fields of toxicology and epidemiology and the implications of research findings for policy and regulation are examined. Topic areas include toxic metals, pesticides and other organic chemicals, ionizing and non-ionizing radiation, vector-borne diseases, pollution of air and water, occupational exposures, and the health effects of global warming. The roles of local, state, and federal governments in environmental health are critically evaluated, as are initiatives by non-governmental organizations.

#### KINE 4600 Wellness Coaching: Resist Chng (3)

This course will explore the trans-theoretical model of behavior change as it pertains to any desired individual behavioral shift. In addition, motivational interviewing strategies to include non-confrontation, reflective listening, client self-efficacy, and risk reduction will be emphasized in this course. Participants will become knowledgeable in the philosophies, practices, and outcomes of models of behavior change.

#### KINE 4650 Grant Writing (3)

This course is designed to teach students basic skills in granting writing. In this course students will learn the different types of grants, components of grants, potential funders and how to search for grants. Emphasis will be placed on learning to break down complex applications into manageable steps. Students will write a practice grant.

#### KINE 4910 Independent Study (1-3)

Students complete an independent project under the supervision of a faculty member. Approval is required by the Program Director.

#### KINE 5001 Internship (3)

This course will help students bridge between college or work or between current careers and the next. Students complete a minimum of 100 hours field experience in a Health and Wellness related facility. This course is to be taken during the senior year of study for the student or with approval of the Program Director. Students are required to turn in a weekly timesheet and weekly journal summaries detailing their duties and experiences on the internship site. Upon completion of the internship, students will submit a final paper and an evaluation from the internship site supervisor. A 2.5 grade point average is required for enrollment in the internship. All internships must be approved by Program Director.

## KINE 6001 Special Topics (1-3)

Special Topics in Kinesiology. Course may be repeated up to unlimited credit hours.

#### **Maximum Hours: 99**

### KINE 6100 Cross Disciplinary Aspects Mgm (3)

This course examines overall management of wellness programs and facilities with an emphasis on human resource management. Future wellness professionals will enhance their knowledge of how these elements can be applied to wellness management settings. Topics include organizational structure, training and managing staff, financial management, legal and ethical concerns and customer service relations.

#### KINE 6200 Health Informatics (3)

Health informatics is the analysis and collection of health information. Topics include data science, data analytics, digital health, health information technology and decision support systems.

#### KINE 6250 Leadership in HEWE Professions (3)

This course surveys major concepts, examples, practices, and theories of organizational leadership with a special emphasis on analyzing and developing personal leadership skills. It is designed to build upon fundamental leadership theories, e.g. situational, charismatic, servant, transactional/transformational, path-goal, trait leadership, skill-based, and the life cycle theory. Participants will study the theoretical and applied nature of administration and leadership with an organizational context in efforts to develop their personal and philosophical framework, e.g. understanding individuals as followers and leaders, decision-making, promoting diversity and respect for all individuals.

#### KINE 6300 Communication Skills for Wellness Professionals (3)

This course provides the student with an overview of health and wellness communication in research, industry, and practice. The role of communication in health care delivery, health promotion, disease prevention, environmental risks, media and technology will be examined.



#### KINE 6310 Sport Psychology (3)

This course will provide the student with an advanced understanding of the principles and methods necessary to design comprehensive strength and conditioning programs that enhance fitness and athletic performance.

#### KINE 6320 Strength & Conditioning (3)

This course will provide the student with an advanced understanding of the principles and methods necessary to design comprehensive strength and conditioning programs that enhance fitness and athletic performance.

#### KINE 6330 Stages of Athletic Development (3)

The course introduces the student to the art and science of coaching with an emphasis on relating theory and practice. This includes discussions on principles of coaching, behavior management, physical conditioning, legal issues, diversity and inclusion, safety, staffing, and public relations and their application toward sports program design and careers in coaching.

#### KINE 6340 Sport Nutrition (3)

This course will provide the student with an understanding of nutrition as it pertains to training and performance of athletic activities. Within the course students will learn basic concepts of energy metabolism as well as nutrient requirements for a variety of physical activities including endurance, strength, speed and weight management. Evaluation of dietary supplements and ergogenic aids will also be discussed.

## KINE 6450 Legal Ethical Principl in Mgmt (3)

This course provides students with the opportunity to gain insight and understanding about the law and its implications on professionals in the fields of health, wellness, sport, education, leisure, and fitness. This course will examine federal, state, and local health care regulations impacting ethical decision-making; the rapidly expanding Codes of Professional Ethics for health care service providers in the fields of health, wellness, sports, education, leisure, insurance, and management; the legal aspects of health information management; and the HIPAA Privacy Standards and rules concerning the use and disclosure of medical and health information.

#### KINE 6500 Strategic Management for Wellness Professionals (3)

This course provides the student with an overview of strategic healthcare management. The course explores the development and implementation of strategy to achieve business goals. As healthcare continues through rapid iterative changes, healthcare leaders must develop skillful use of strategic planning and execution. This course explores concepts such as value-based care, healthcare reform, healthcare business models, innovation in healthcare, and stakeholder engagement.

### KINE 6510 Sport Marketing and Finance (3)

This course will examine theories, principles, fundamentals, applications and challenges of marketing and financing in exercise, sport, and recreation industries.

#### KINE 6520 Fundraising & Capital Dev Plan (3)

This course will provide an overview of fundraising, donor relations, and non-profit associations. Topics will include major gift fundraising, annual funds, booster club organizations, priority seating programs, and the importance of donor research in the fundraising process.

## KINE 6530 Ethical & Legal Iss in Sport (3)

This course will examine the legal principles, business models and rules governing the sports industry and the legal controversies and policies surrounding those rules.

### KINE 6540 Sport Media and Communication (3)

This course will provide the student with an introduction to and overview of the sports communication field, including media organizations, marketing and advertising. Topics covered include sports media; digital media including print and electronic media and social media, college sports information and marketing and promoting sports teams.

## KINE 6550 Financial Management for Wellness Professionals (3)

This course provides an overview of financial management in health services delivery. The course examines the importance of financial management in health-related fields as well as the financial skills leaders need to make important financial decisions that contribute to the success of a healthcare delivery organization, such as financial analysis, tax laws, cost accounting, and strategic financial planning.

## KINE 6620 Sport in Society (3)

This course will examine the institution of sport from a sociological perspective. Sport will be examined as a social and cultural phenomena using sociological concepts to investigate such issues as social identities (race/ethnicity, class, gender, sexuality), mass media, youth sport, high school and intercollegiate athletics, and violence in sport.

#### KINE 6650 Res Methods in Kinesiology (3)

In this course, students will investigate research methodology, experimental design and scientific writing, research literature and conduct research. Students will also be introduced to concepts in probability, basic statistical inference procedures of estimation, confidence intervals and hypothesis testing directed toward applications in science.



#### KINE 7001 Independent Study in KINE (1-3)

Approval of Kinesiology program director required. Students may arrange for independent study with an instructor to pursue a project or complete a study of interest in Kinesiology. In general, independent study earns three credits. Requirements will vary depending on the project and will involve some combination of readings, orals reports, and written work.

#### KINE 7100 Exerc & Nutrition HIth Disease (3)

This course addresses the key health concerns and core differences in programming needs of various populations throughout the life cycle. An examination of nutritional concerns, requirements and metabolism from psychosocial, physical, and economic factors affecting nutritional status through the life span. Preparation of the health professional in assessing and providing services to clients and populations will be addressed. Students will also learn the roles that physical activity and nutritional practices play in the prevention, management, and treatment of chronic diseases and conditions, such as obesity, cardiovascular disease, cancer, diabetes, COPD, arthritis, depression, and anxiety. Populations of focus include children, adolescents, adults, and senior citizens. Methods of physical activity and nutritional assessment for each stage of the life cycle will be examined.

#### KINE 7150 Programming Approaches (3)

This course provides an overview of leading health program planning theories including PRECEDE/PROCEDE and intervention mapping. Organizational and administrative approaches utilized in the conduct of health/wellness promotion programs will be described. Emphasis will be placed upon the selection, development, promotion, conduct, and evaluation of the various components of health/wellness promotion programs.

#### KINE 7200 Intervention Strategies (3)

This course will provide students with an understanding of the process involved in planning health interventions in health education and health promotion environments. Practical applications of the needs assessment process, program development and implementation will be executed including the skills, theory and practice involved in assessing clients to develop health related life skills.

#### KINE 7250 Motivational Interviewing HEWE (3)

Motivational Interviewing (MI) is a consumer centered instruction method for improving inherent motivation to change by exploring and resolving uncertainty. This course will include content of exploration into the attitudes and motivations of personal health behavior and an in-depth exploration of motivational interviewing principles and applications.

#### KINE 7300 Employee and HIth & Wellness (3)

Successful companies must understand the importance of workplace involvement in health. The relationship of employee health to healthcare costs and productivity will be discussed as a return on investment (ROI) and an investment in human capital. Strategic and product management planning are developed in relationship to disease management versus population wellness theory. Assessments of employer needs, organizational culture, environmental policy, and procedures supportive to desired outcomes are practiced. Professionals learn about aligning client needs and wants with best practice programs design, implementation, and evaluation for successful results. Age, gender, race, and issues that affect participation in wellness programs are reviewed.

## KINE 7350 Integrating HIth Promo Sch Set (3)

This course addresses the growing demand for wellness initiatives for students, their families, and school staff. The coordination of teachers, school nurses, school administrators, and community health promotion professionals will set the stage for a comprehensive approach to building wellness programming within the school community.

### KINE 7400 Health Systems and Policy (3)

This course provides information pertaining to the U.S. healthcare system with emphasis on health and wellness. It provides an overview of the major public and private stakeholders including public health, insurance, and healthcare providers. Participants will examine how health policy impacts the design and financing of wellness programs.

## KINE 7450 Health Equity & Determinants (3)

This course is designed to examine the impact of social, economic, and environmental determinants of health on various populations. Health inequities found among marginalized groups due to socioeconomic status, race/ethnicity, sexual orientation, gender, disability status, geographic location, or some combination of these factors will be highlighted. This course will explore health outcomes found among these populations and will address health promotion policies required to attend to these issues.

### KINE 7800 Internship/Capstone (3)

The goal of this experience is to provide graduate students in Health Promotion and Wellness Management with an opportunity to apply the professional knowledge they have gained in their coursework to a professional setting. In addition to participating in the daily operation of the site, the student will complete a major project on site and submit a document that describes the learning experience.

Enrollment limited to students in the Kinesiology department.