KINESIOLOGY

COURSE CONCENTRATIONS

A concentration is a specific area of classes within Kinesiology that help prepare you for specific career interests. You should declare a concentration before or during your first semester as a Kinesiology major. This guide can be used as a tool to help you customize your college experience based on your career goals. The Department of Kinesiology currently has three areas of concentration 1) Health Science Pre-Professional, 2) Applied Exercise, and 3) Physical Activity and Health Promotion.

CONCENTRATION: PHYSICAL ACTIVITY AND HEALTH PROMOTION

The Physical Activity and Health Promotion (PAHP) concentration focuses on the application of behavioral science to promote physical activity and health, and includes an interdisciplinary set of courses that examine the individual, social, environmental, and health policy factors that influence health behaviors. In the PAHP concentration, students are directed to courses that provide excellent preparation for fields in public health, disease prevention and health promotion, program planning and evaluation, worksite wellness, community health promotion, health policy, epidemiology, health and wellness coaching, and applied behavioral research.

Students in this concentration will complete a lower level core of Kinesiology courses that cover the field of Kinesiology, research, and introduce the areas of exercise physiology and exercise behavior. Students in the PAHP emphasis area will complete two exercise behavioral science courses and one exercise physiology course. These upper level courses build upon the foundation of the introductory course in each area and give students skills in both the physical systems and human interaction and behavior.

Students in PAHP concentration may benefit from minors or courses in the areas of Psychology, Sociology, Community Planning, and Nutrition and Health. Students can also pursue the combined BS/MS degree or the combined BS/MPH degree. Internships, research experience, and study abroad experience provide additional value to this concentration.

Lower level core (KIN 220, 310, 335/6, 345): 18 hours

Upper level core: 18 hours

Upper Level Exercise Behavioral Science Core (Select at least 2)

- **KIN 600 Interpersonal Aspects of Physical Activity:** An examination of theory and research related to interpersonal aspects of physical activity.
- **KIN 602 Social Structural Determinants of Physical Activity:** An examination of how social structural determinants influences participation in physical activity.
- **KIN 610 Program Planning and Evaluation:** Theories and models and the stages and activities of planning, implementing, and evaluating health promotion programs.
- **KIN 612 Policy, Built Environment and Physical Activity:** Examination of the characteristics of active living policies and neighborhood/community design that contribute to improved health.
- **KIN 655 Individual Physical Activity Promotion:** A study of determinants and behavior change strategies that can be applied to promote physical activity among individuals.

<u>Upper Level Exercise Physiology Core (Select at least 1)</u>

- **KIN 601 Cardiorespiratory Exercise Physiology**: An examination of the structure and function of the respiratory system
- KIN 603 Cardiovascular Exercise Physiology: Study of the structure and function of the cardiovascular system
- **KIN 607 Muscle Exercise Physiology:** Subcellular, cellular, and tissue structure of skeletal muscle and the relationship of these structural characteristics to the functioning of the muscle.
- **KIN 609 Environmental Physiology:** Study of the physiological adaptations to acute and chronic challenges imposed by the environment.
- **KIN 611 Neurological Exercise Physiology**: Study of the structure and function of the nervous system as it pertains to health and disease.
- **KIN 617 Signaling Pathways in Physiology**: Current concepts of biological signaling transduction and its role in controlling genes expression and protein synthesis in health and disease.

<u>Kinesiology Electives</u> (Includes the above courses (Exercise Physiology Core and Exercise Behavioral Science Core) and those outlined below) (6 hours)

- **KIN 320 Motor Learning and Development**: Issues of motor learning and development as they relate to the application of instructional techniques.
- KIN 330 Biomechanics: Mechanical and anatomical aspects of human movement.
- **KIN 380 Principles of Exercise Training**: This course is designed to cover the application of current scientific research on program design for healthy athletes competing in any sport or physically active individuals.
- **KIN 398- Exercise and Chronic Disease:** Explores the pathophysiology, testing protocols, exercise responses, and benefits of exercise specific to many of the most prevalent chronic diseases impacting our society.
- **KIN 597 Research Experience in Kinesiology**: Exposure to and assisting with current research projects in a laboratory setting
- **KIN 625 Exercise Testing and Prescription**: Benefits and risks of exercise testing and prescription with healthy populations, individuals at risk, and patients with cardiovascular and metabolic diseases.
- KIN 635 Nutrition and Exercise: The interrelationships between diet, nutrition, and exercise.
- **KIN 792 Health-Fitness Instructor Internship**: Supervised field experience in settings such as Hospital Wellness Centers, YMCA, YWCA, municipal recreation agency, or industrial fitness agency.

Sample Course Progression for Major Courses (120 hours minimum)

Fall Semester Courses	Hours	Spring Semester Courses	Hours
FRESHMAN			
KIN 220	4	BIOL 198	4
Humanity Elective*	3	MATH 100	3
PSYCH 110	3	SOCIO 211	3
GNHE 210	1	ENGL 200	3
ENGL 100	3	FNDH 132	3
Total	14	Total	16
SOPHOMORE			
CHM/PHYS or BIOCHM	4	KIN 360 or BIOL 340	8
KIN 310	3	KIN 345	5
COMM 106	3	Unrestricted Elective	3
STAT 325	3		
Unrestricted elective	3		
Total	16	Total	16
JUNIOR			
KIN 335/336	5	KIN Physiology Core	3
Humanity Elective*	3	KIN Behavioral Core	3
KIN Behavioral Core	3	CIS 101-104 or CIS 111	4/3
Unrestricted Elective	3	Unrestricted Elective	3
		Unrestricted Elective	3
Total	14	Total	14/15
SENIOR			
KIN Behavioral Core	3	KIN Elective	3
KIN Elective**	3	KIN Elective	3
Econ 110	3	Unrestricted Elective	3
Unrestricted Elective	3	Unrestricted Elective	3
Unrestricted Elective	3	Unrestricted Elective	3
Total	15	Total	15

^{*}Humanities electives are to be selected from the approved Human Ecology list.