Minor in Exercise Science
A collaboration between School of Nursing and Health Studies, and the School of Education

For questions about courses, please contact:
Jamie Hunt, PhD  huntja@umkc.edu  816-235-2666
Program Director, Bachelor Health Sciences, Assistant Teaching Professor

Teresa Dilley  dilleyty@umkc.edu  816-235-2753
Coordinator, Exercise Science, Visiting Assistant Teaching Professor

Please note: As of Fall 2018, all courses must be completed with a grade of “C-“ or higher for minor credit.

Required Courses to earn Minor in Exercise Science:

23 required hours
HLSC 110 Personal Wellness  3 hrs
HLSC 120* Anatomy and Physiology I  4 hrs
HLSC 160* Anatomy and Physiology II  4 hrs
PE 300 Mechanical Analysis of Human Movement (prereq: HLSC 120 and 160 or concurrent enrollment)  3 hrs
PE 350 Physiology of Sport and Exercise (prereq: HLSC 120 and 160 or concurrent enrollment)  3 hrs
PE370 Psychology of Sport and Exercise  3 hrs
PE391 Fitness Assessment and Exercise Prescription (Prereq: PE350 or concurrent enrollment)  3 hrs

Total  23 hrs

*If students are transferring an approved course equivalency for Anatomy & Physiology I & II that totals less than eight hours, they are required to take courses from the “strongly recommended” list to ensure they have earned a total of 23 hours to be awarded the Minor in Exercise Science. These courses include PE 157 Weight Training (1 credit hour), HLSC 200 (1 credit hour), and PE 398 Independent Study: American College of Sports Medicine Workshop for Personal Training (1 credit hour).
Course Descriptions

Available Each Fall/Spring
HLSC 110 Personal Wellness – 3 credit hours – on campus
This course presents an overview of health behaviors and actions needed to achieve a combination of physical, mental, and social well-being through intelligent lifestyle choices. Effective strategies for staying healthy and improving one’s health will be explored. Elements of stress management, preservation of physical and mental well-being, personal hygiene and strong social relationships will be discussed.

PHYS-ED 370 Psychology of Sport and Exercise – 3 credit hours – online
Exploration of psychological constructs related to the competitive sport process and to physical activity.
Prerequisite: PSYCH 210

Available Each Fall
HLSC 120 Anatomy & Physiology I – 4 credit hours – on campus
This course examines the structure and function of the human body from the molecular to the organism level as they interact among all body systems across the life span. Instructors also attempt to correlate course materials with the clinical aspects of the application of physiological knowledge. Co-requisite laboratory exercises provide practical application of theoretical concepts. In this first term of two-term course, molecular biology, biochemistry, cellular biology, and histology are studied as well as the integumentary, musculoskeletal, and nervous systems.

PHYS-ED 300 Mechanical Analysis of Human Movement – 3 credit hours – on campus
Study of the kinesiologic and biomechanical aspects of human motion with focus on application to sport skill, dance and exercise situations.
Prerequisites: HLSC 120 and HLSC 160 or equivalent or concurrent enrollment.

Available Each Spring
HLSC 160 Anatomy & Physiology II – 4 credit hours – on campus
This course is a continuation of HLSC 120. Co-requisite laboratory exercises provide practical application of theoretical concepts. Physiologic systems including endocrine, cardiovascular, immune, respiratory, digestive, renal, and reproductive are studied as well as embryology and genetics.
Prerequisite: HLSC 120

PHYS-ED 350 Physiology of Sport and Exercise – 3 credit hours – on campus
Study of the concepts and principles of exercise physiology with the intent of learning how to apply them to exercise, sport and movement experiences. Includes development of fitness testing skills, program planning and exercise.
Prerequisites: HLSC 120 and HLSC 160 or equivalent or concurrent enrollment.
PHYS-ED 391 Fitness Assessment and Exercise Prescription – 3 credit hours – on campus
This course introduces students to health appraisal and fitness assessment of individuals. The course proceeds with prescribing exercise and conditioning programs, to enhance health and develop physical performance.
Prerequisite: PHYS-ED 350

Strongly Recommended Courses Available as follows:

Available Each Fall/Spring
PHYS-ED 157 Weight Training – 1 credit hour

Available Each Fall/Spring
HLSC 200 First Aid/CPR – 1 credit hour
This course is designed to certify students with the American Heart Association (AHA) in Basic Life Saving for Healthcare Providers and bloodborne pathogens. Students will be exposed to critical concepts of high quality Cardiopulmonary Resuscitation (CPR), the AHA’s Chain of Survival, and 1 and 2 rescuer CPR and Automatic External Defibrillator (AED) for adult, child and infants. Bag-mask technique, rescue breathing, relief of choking will be covered. Adult and pediatric first aid basics, medical emergencies, injury emergencies, and environmental emergencies will be covered. The course will include information on bloodborne pathogens (protection, action, proper cleaning and reporting).

Available Each Fall/Spring
PHYS-ED 398 Independent Study: American College of Sports Medicine Workshop for Personal Training – 1 credit hour
Guided study of a selected topic in Physical Education.