



**Exercise Science
Bachelor of Science
Behavioral & Health Sciences
Traditional**

Program Coordinator: J. O'Neil

Exercise Science is a multifaceted field of study in which movement or physical activity is the intellectual focus. This includes exercise in the improvement of health and physical fitness and activities of daily living, work, sport, and play. It involves special population groups such as children and the elderly; persons with disability, injury, or disease; and athletics. Because an interdisciplinary approach is often used to address issues in exercise science, this area of study applies knowledge, methods of inquiry, and principles from a wide spectrum of academic disciplines. This program is designed for traditional students who desire to incorporate a rigorous academic background in kinesiology and exercise science into their future vocational and career plans.

Employment opportunities for Exercise Science professionals are located in the health and fitness industry, where skills in evaluating health behaviors, risk factors, conducting fitness assessments, writing exercise prescriptions for healthy and controlled disease populations, motivating individuals to modify negative health habits, and promoting positive healthy lifestyle changes are essential components of their respective job.

The B.S. in Exercise Science program has three tracks designed to optimize the vocational path of its students.

The Kinesiology track is designed for students who are interested in pursuing graduate degree programs in Exercise Science/ Kinesiology-related fields or health care related professional graduate programs, such as physical therapy, occupational therapy, and athletic training. This track is not designed or intended to meet the needs of students who are pursuing medical or pharmacy school. This track also requires a Biology or Chemistry minor.*

The Health and Fitness track is designed for those students wishing to pursue a vocation within the fitness and wellness industry with curricular design aligning with certification requirements from the *American College of Sports Medicine* and the *National Strength and Conditioning Association*.

The K-12 Licensure track is designed to provide students with knowledge and skills to organize and administer physical education, intramural, and athletic programs; to teach, assess and evaluate health and physical education courses at the elementary, middle, and high school levels; and to adapt methods of teaching to meet the needs of children and adolescents with special needs.

*** For those students wishing to pursue health care related professional graduate programs in physical therapy, occupational therapy, athletic training, or other related fields,** graduate program admission requirements can vary by institution and by discipline. Freshman undergraduate students are encouraged to explore graduate school requirements for each potential institution they wish to attend. Although it is ultimately the

student's responsibility to complete any additional prerequisite coursework, academic advisors are available to assist students with incorporating these requirements into his/her academic plan. Students are strongly encouraged to seek out this assistance very early in their academic path at King. There is no guaranteed admittance into graduate school by completing these prerequisites, as each student is responsible for meeting each graduate school's requirements and successfully completing the admission process.

Student Learning Outcomes

Upon completion of the B.S. in Exercise Science program, students will possess the knowledge, skills, and abilities to:

1. Design and evaluate nutrition and physical activity programs that promote health and improve quality of life.
2. Explain how the scientific process informs our understanding of health, nutrition, and human movement.
3. Demonstrate competency with laboratory skills used to assess human movement and physical activity.
4. Effectively communicate content related to the field of health, human movement and nutrition in oral, written, and/or digital formats.

Program-Level Student Learning Outcomes in the Exercise Science major are based on recommendations of the American Kinesiology Association's *Undergraduate Core Curriculum in Kinesiology*. This program will prepare competent entry-level Exercise Science professionals in the cognitive (knowledge), psychomotor (skills) and affective (abilities) learning domains.

CPR (Cardiopulmonary Resuscitation) Certification

All students majoring or minoring in Exercise Science must possess current certification in CPR from either the American Red Cross or the American Heart Association. There are two ways to gain this certification. A student may take PHED 1620 CPR, or may present a current CPR certification card to the Exercise Science program coordinator and demonstrate proficiency in CPR through written and skills testing under the direction the Exercise Science coordinator.

Core Curriculum/General Education Requirements

Exercise Science majors should fulfill specified categories of the King Core Curriculum by taking the courses indicated below. See the "The Core Curriculum" section of the catalog for additional details.

Wellness for Life

PHED 1110

Wellness for Life 2 s.h.

Quantitative Literacy

MATH 1560

Introduction to Statistics 4 s.h.

Science

BIOL 1010

Human Anatomy & Physiology I 4 s.h.

Recommendation for an Additional Human Culture Category Course

PSYC 1520

General Psychology 4 s.h.

Exercise Science Major Common Requirements

ATEP 2510 Care and Prevention of Athletic Injuries	4 s.h.
ATEP 3680 Kinesiology	4 s.h.
ATEP 3690 Exercise Physiology	4 s.h.
BIOL 1020 Human Anatomy & Physiology II	4 s.h.
EXSC 2500 Introduction to Nutrition	2 s.h.
EXSC 2600 Strength and Conditioning Theory and Practice	2 s.h.
EXSC 3300 Exercise Programs for Special Populations	2 s.h.
EXSC 3700 Health Fitness Assessment	4 s.h.
EXCS 4990 Comprehensive Assessment	0 s.h.
PSYC 3050 Lifespan Human Development	4 s.h.

Track Requirements for a B.S. in Exercise Science

Students must choose one Track: Kinesiology, Health and Fitness, or K-12 Licensure.

Kinesiology Track*

ATEP 3010 Methods of Research and Design in the Health Sciences	2 s.h.
EXSC 3500 Exercise Training and Performance	4 s.h.
EXSC 3750 Biomechanics	4 s.h.
EXSC 3400 Exercise and Nutrition in Chronic Disease	2 s.h.

*Requires Biology or Chemistry Minor

Biology Minor

BIOL 2110 General Biology I	4 s.h.
BIOL 2120 General Biology II	4 s.h.
Additional Biology Electives at or above the 3100 level	12 s.h.
Total Minor Requirements	20 s.h.

Chemistry Minor

CHEM 1110 General Chemistry I	4 s.h.
CHEM 1120 General Chemistry II	4 s.h.
CHEM 2110 Organic Chemistry I	4 s.h.
Additional Electives: BIOL 3700, CHEM 2120, or Chemistry Electives at or above the 3100 level	8 s.h.
Total Minor Requirements	20 s.h.

Summary of Total Credits	
Core Curriculum/General Education	42 s.h.
Major Program Requirements	
Common Requirements	30 s.h.
Track Requirement	12 s.h.
Biology or Chemistry Minor	20 s.h.
Electives	20 s.h.
Minimum to Earn Bachelor of Science	124 s.h.

Health and Fitness Track

ATEP 3010	
Methods of Research and Design in the Health Sciences.....	2 s.h.
PHED 2010	
Personal and Community Health	4 s.h.
PHED 2910	
Athletic Administration	2 s.h.
PHED 2940	
Psychology of Coaching	2 s.h.
EXSC 3400	
Exercise and Nutrition in Chronic Disease.....	2 s.h.
EXSC 3500	
Exercise Training and Performance.....	4 s.h.
PHED 3565	
Ethics and Legal Issues in Sport Management.....	4 s.h.
PHED 3650	
Assessment and Evaluation	3 s.h.
EXSC 3750	
Biomechanics	4 s.h.

Summary of Total Credits	
Core Curriculum/General Education	42 s.h.
Major Program Requirements	
Common Requirements	30 s.h.
Track Requirement	27 s.h.
Electives (Minor, 2 nd Major, Concentration, Specialization).....	25 s.h.
Minimum to Earn Bachelor of Science	124 s.h.

K-12 Licensure Track*

EDUC 3630	
Methods and Materials for Elementary Physical Education.....	4 s.h.
EDUC 3640	
Methods and Materials for Secondary Physical Education	4 s.h.
PHED 1620	
CPR.....	1 s.h.
PHED 1630	
First Aid.....	1 s.h.
PHED 2010	
Personal and Community Health	4 s.h.
PHED 2500	
Recreational Leadership	2 s.h.

PHED 3630	
Teaching Individual and Team Sports	4 s.h.
PHED 3650	
Assessment and Evaluation	3 s.h.
*Requires K-12 Education Licensure Minor	

K-12 Licensure Minor**

EDUC 2030	
Introduction to Teaching: K-12	2 s.h.
EDUC 2031	
Introduction to Teaching Practicum	1 s.h.
EDUC 2100	
Survey of Exceptional Children.....	4 s.h.
EDUC 2370	
Reflective Teaching	3 s.h.
EDUC 2900	
Foundations of Education	3 s.h.
EDUC 2950	
Technology for Teachers	2 s.h.
EDUC 3390/3391	
Secondary Curriculum and Methods	3 s.h.
EDUC 3590	
Content Area Reading.....	3 s.h.
EDUC 3600	
Assessment and Evaluation	3 s.h.
EDUC 4470/4480	
Student Teaching: Grades K-5.....	5 s.h.
EDUC 4490/4500	
Student Teaching: Grades 6-12.....	5 s.h.
EDUC 4950	
Capstone Seminar: Grades K-12.....	2 s.h.
PSCI 2120	
Cultural Diversity in America.....	4 s.h.

**Requires admittance to the Teacher Education Program

Summary of Total Credits

Core Curriculum/General Education	46 s.h.
Major Program Requirements	
Common Requirements	30 s.h.
Track Requirement	23 s.h.
K-12 License Minor	40 s.h.
Minimum to Earn Bachelor of Science	139 s.h.