

EXERCISE AND REHABILITATION SCIENCE, BS

The Bachelor of Science in Kinesiology in Exercise and Rehabilitation Science is designed for students desiring to pursue graduate or professional school in fields such as Athletic Training, Exercise Physiology, Physical or Occupational Therapy, Nutrition Science/Dietetics, Physician Assistant, Chiropractic and Cardiac Rehabilitation. This degree prepares the student to meet many of the prerequisite courses necessary for application to the above-mentioned professional degree programs. The BS degree also requires a 30-hour Concentration to be chosen from the Natural Science disciplines of Biology, Chemistry, Physics, and Math. For the Bachelor of Science in Kinesiology in Exercise and Rehabilitation Science, 15 of these hours must be from Biology.

Students pursuing this degree have the option of gaining the following certifications through elective class completions:

- FMS Functional Movement Screening Level 1 Certification
- NASM Personal Training Certification

Additionally, the Washburn Kinesiology Department has articulation arrangements for guaranteed admissions to the following graduate-level healthcare professional programs. Speak with a Kinesiology faculty advisor for more information.

- Cleveland University-Kansas City Doctor of Chiropractic and Master of Science in Exercise Physiology and Sports Performance programs
- University of Kansas School of Health Professions Master of Athletic Training program
- Wichita State University School of Applied Studies Master of Athletic Training program
- Oklahoma State Center for Health Sciences Master of Athletic Training program

Degree Requirements

In addition to the requirements stated below, students must complete 34-35 hours of General Education (<https://catalog.washburn.edu/undergraduate/programs-degrees-graduation-requirements/general-education-requirements/>), all requirements for a Bachelor of Science (<https://catalog.washburn.edu/undergraduate/college-arts-sciences/degrees/bachelor-science/>) degree, and any additional hours needed to reach the minimum 120 credit hours required for graduation. Some of the courses below may also fulfill general education or other degree requirements. Please see your advisor for more information.

Code	Title	Hours
Required Course Inside Department		
KN 248	Wellness Concepts and Applications	3
KN 291	Professional Experience and Development in Exercise and Rehab Science	1
KN 299	Assessment & Procedures in Health & Physical Activity	3
KN 300 or KN 318	Psychology of Sport and Physical Activity Exercise Psychology	3
KN 308	Nutrition for Sports & Fitness	3
KN 321	Anatomical Kinesiology	3
KN 326	Physiology of Exercise	3

KN 330	Administration of Exercise and Rehabilitation Science	3
KN 342	Teaching & Coaching Exercise & Fitness Activities	3
KN 357	Sports Performance Training and Conditioning	3
KN 403	Biomechanics	3
KN 410	Fitness Testing and Exercise Prescription	3
KN 411	Current Literature in Kinesiology	3
Kinesiology Electives (select from the following courses) ¹		8
KN 257	Prevention and Care of Athletic Injuries	
KN 311	Motor Learning & Development	
KN 315	Special Topics in Kinesiology	
KN 335	Human Factors and Ergonomics	
KN 341	Teaching & Coaching Team Activities	
KN 343	Teaching & Coaching Lifetime Activities	
KN 344	Teaching & Coaching Rhythms, Tumbling & Fundamental Activities	
KN 350	Orthopedic Evaluation	
KN 366	Functional Movement Screening Certification (FMS Certification)	
KN 367	Therapeutic Exercise	
KN 399	Personal Training Certification (CPT Certification)	
KN 498	Internship: Health and Fitness Promotion	
KN XXX	Other KN course 300 level or above	
Subtotal		45
Required Courses Outside Department		
BI 100 & BI 101 or BI 192	Human Biology and Human Biology Laboratory General Cellular Biology	5
BI 255	Human Physiology	4
BI 275	Human Anatomy	4
BI XXX	Biology Elective	2
CH 121 or CH 151	General, Organic, and Biological Chemistry I Fundamentals of Chemistry I	5
EN 308	Scientific and Technical Writing	3
MA 116 or MA 117 or MA 123 or MA 151	College Algebra Trigonometry Pre-Calculus Calculus & Analytic Geometry I	3
PY 151 or MA 140	Psychological Statistics Statistics	3
PS 131 & PS 132 or PS 261	Biological Physics for the Health and Life Sciences and Biological Physics for the Health and Life Sciences Laboratory College Physics I	4-5
Non-Kinesiology Electives (select from the following courses) ¹		9
AL 257 or AL 265	Applied Neurophysiology - Occupational Therapy Applied Neurophysiology - Physical Therapist Assistant	

AL 320	Human Disease	
CN 306	Health Communication	
HL 377	Critical Issues in Health	
HS 371	Mental Health and Aging	
or HS 378	Issues in Aging	
MU 307	Music and the Brain	
PH 214	Medical Ethics	
PY 231	Abnormal Psychology	
PY 326	Health Psychology	
EMT Certification (e.g. from WU Institute of Technology) can also count in this section for 1-6 credits		
Other Required Courses		
KN 250	Introduction to Kinesiology	3
& NU 102	and Medical Terminology	
or AL 101	Foundations of Healthcare	
Subtotal		45-46
Total Hours		90-91

¹ 6 out of 9 KN electives need to be upper level and 6 out of 9 non-KN electives need to be upper level.