Exercise Science is the study of the human body’s metabolic, physiological, and biomechanical response and adaptation to acute and chronic exercise.

What you’ll study: Science-based courses that emphasize the human body including Human Anatomy with cadaver laboratory; Human Physiology; Exercise Physiology; Biomechanics and Neuromechanics; Nutrition for Health and Human Performance; Exercise Prescription.

What you’ll learn and do as an Exercise Science and Pre-Health Professions major:

• Prescribe safe and effective exercise programs and develop nutrition strategies for disease prevention and enhanced human performance
• Become skilled measuring resting and exercise heart rate and blood pressure, and administer laboratory procedures to assess body composition, muscular strength and endurance, blood lactate, and aerobic and anaerobic fitness
• Conduct and understand research using both human and animal models
• Gain ‘real-world’ experience in a clinical or work setting related to your career goals
• Earn a national certification as a Personal Trainer, Certified Exercise Physiologist, or Certified Strength and Conditioning Specialist

In addition to Creighton’s professional schools, graduates have gone on to …

• Medicine at University of Nebraska Medical Center (UNMC), University of Iowa, Scritch School of Medicine Loyola Chicago, University of Indiana
• Physical Therapy at UNMC, Northwestern University, Regis University, Washington University, Duke University, University of Kansas, University of Colorado
• Occupational Therapy at University of Washington, Univ. of New England
• Dentistry at University of Iowa, University of Minnesota
• Osteopathic Medicine at Des Moines University, University of Iowa, AT Still University
• Physician Assistant at UNMC, Wichita State University, Emory University
• Accelerated Nursing at UNMC, St. Louis University, Johns Hopkins University
• Masters in Exercise Science at University of Nebraska Omaha, Kansas State University, University of Wyoming, University of Kansas, University of Houston

Employment: • Pharmaceutical Sales • Jesuit Volunteer Corps• Teach for America • Commercial/ Community/ Corporate Fitness at Prairie Life, YMCA, Live Well Kids, Wellbound Fitness, and Healthbreak
Admission Requirements:
Students must have an overall Grade Point Average of 2.75 in 30 or more hours of coursework at Creighton University and have grades of "C" or better in General Chemistry and General Biology.

Degree Requirements:
- CHM 203/04 General Chemistry 4 hours
- BIO 201/05 General Biology 4 hours
- EXS 125 First Aid 2 hours
- EXS 142 Weight Training and Program Design 1 hour
- EXS 144 Aerobic Conditioning and Group Fitness 2 hours
- EXS 240 Foundations of Fitness & Wellness 3 hours
- EXS 320 Human Physiology 4 hours
- EXS 331 Human Anatomy 4 hours
- EXS 334 Biomechanics 4 hours
- EXS 335 Exercise Physiology 4 hours
- EXS 350 Nutrition for Health & Sports Performance 3 hours
- EXS 391 Career Preparation & Professionalism 3 hours
- EXS 401 Exercise Prescription 3 hours
- EXS 407 Basic Statistics & Research Design 3 hours
- EXS 489 Laboratory Methods & Procedures 4 hours
- EXS 492 Internship 2 hours

Electives:
- EXS 195 Introduction to Athletic Training 3 hours
- EXS 420 Essentials of Strength & Conditioning 3 hours
- EXS 495 Directed Independent Study 0-4 hours
- EXS 497 Directed Independent Research 0-4 hours
- EXS 535 Applied Immunology 3 hours

Major’s Club
Exercise Science Excellence in Leadership (EXSEL)

EXSEL members sponsor an annual Welcome BBQ for students and faculty, host educational speakers and are active in many philanthropic events.

Student Research Opportunities

Independent research is an important part of the undergraduate education experience at Creighton University. Students within the Department of Exercise Science and Pre-Health Professions have the opportunity to work closely with faculty to design, conduct, analyze and report the results of their research both regionally and nationally. Current areas of research include sports nutrition, gastrointestinal function, immunology, the stress response to exercise, biomechanics, and the effects of exercise on muscle dysfunction and muscle wasting during cancer treatment using a rat model.

Internship Opportunities

Students gain ‘real-world’ experience working with mentors in several fields including:
- Physical Therapy
- Occupational Therapy
- Pharmacy
- Dentistry
- Medicine
- Physician Assistant
- Nursing
- Chiropractic
- Athletic Training
- Fitness/Wellness
- Personal Training

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