

Exercise Science and Pre-Health Professions

Creighton University—Omaha, Nebraska

Exercise Science and Pre-Health Professions Major

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.

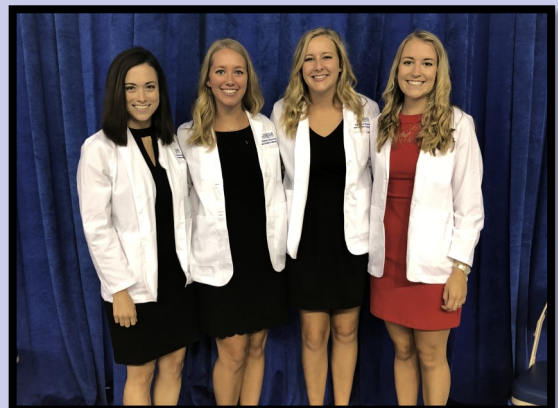
What you'll learn and do as an Exercise Science and Pre-Health Professions major:

- *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, Scripps 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



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.



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**



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.



Course Information

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