EXERCISE SCIENCE, BACHELOR OF SCIENCE (BS)

This major has four options and is designed for those students who are not interested in teaching but are interested in fitness, wellness or clinical positions; or a graduate program in athletic training, occupational therapy (http://catalog.ewu.edu/health-science-public/occupational-therapy/#advancedstandingtext), physical therapy or exercise physiology. Graduates are prepared to work in various settings as managers of fitness programs. The options include but are not limited to athletic training, corporate fitness, commercial fitness clubs, a YMCA, or other non-commercial program, retirement centers or hospital rehabilitation programs in cardiac rehabilitation, respiratory therapy and diabetes support. The program prepares students to pursue advanced degrees in professional programs in athletic training, occupational and physical therapy or chiropractic as well as advanced degrees in exercise physiology, biomechanics or cardiac rehabilitation and adult fitness. The program and course work prepares students to pursue certifications from organizations including ACSM, NASM, NSCA and ACE. These certifications are widely accepted in the fitness industry.

Declaration Requirements for Exercise Science and Pre-AT

- must complete any two classes of
  required BIOL 232, BIOL 233, BIOL 234
  or CHEM 161, CHEM 162, CHEM 163 series (or equivalent);
- grade for each class must be ≥C.

Declaration Requirements for Pre-OT, and Pre-PT

- must complete any two classes of
  required BIOL 232, BIOL 233, BIOL 234
  or CHEM 161, CHEM 162, CHEM 163 series
  or PHYS 131, PHYS 132, PHYS 133 series (or equivalent);
- grade for each class must be ≥B.

Note for all students

- all four options require additional courses to complete the general education requirement;
- completion of any one of the four options as shown will not guarantee completion of 60 credits of upper division credits;
- students should work with their advisor to select appropriate courses or minor.

Required Core Courses–minimum grade ≥C+ for each		
EXSC 301	INTRODUCTION TO EXERCISE SCIENCE	1
EXSC 455	RESEARCH AND ANALYSIS	3
EXSC 460	PHYSIOLOGY OF EXERCISE	4
EXSC 480	CLINICAL EXERCISE PHYSIOLOGY	3
HLED 193	STANDARD FIRST AID AND SAFETY	2
HLED 372	APPLIED NUTRITION AND PHYSICAL FITNESS	3
PHED 349	ANATOMICAL KINESIOLOGY	4
PHED 350	PHYSIOLOGICAL KINESIOLOGY	4
PHED 352	MECHANICAL KINESIOLOGY	4
Required Supporting Courses		30
Pre-OT and Pre-PT require minimum average GPA ≥3.0 for each series listed below.		
Exercise Science and Pre-AT require a minimum grade of ≥C for each course listed below.		
BIOL 232 & BIOL 233 & BIOL 234	HUMAN ANATOMY AND PHYSIOLOGY NON-BIOL MAJORS and HUMAN ANATOMY AND PHYSIOLOGY NON-BIOL MAJORS and HUMAN ANATOMY AND PHYSIOLOGY NON-BIOL MAJORS	
CHEM 161 & CHEM 162 & CHEM 163	GENERAL CHEMISTRY FOR THE HEALTH SCIENCES and ORGANIC CHEMISTRY FOR THE HEALTH SCIENCES and BIOCHEMISTRY FOR THE HEALTH SCIENCES	
Choose one of the following		5
EXSC and Pre-AT–minimum grade ≥C		
Pre-OT and Pre-PT–minimum grade ≥B		
CSBS 320	STATISTICS FOR THE SOCIAL SCIENCES	
MATH 380	ELEMENTARY PROBABILITY AND STATISTICS	
Choose two from the following–minimum grade ≥C+ for each		4-6
EXSC 481	ELECTROCARDIOLOGY INTERPRET	
PHED 333	GROUP EXERCISE INSTRUCTOR TRAINING	
PHED 334	PERSONAL TRAINING	
PHED 335	STRENGTH AND CONDITIONING PROLAB	
Communications Elective–choose one from the following; minimum grade ≥C		4-5
BUED 302	BUSINESS COMMUNICATION	
CMST 312	NONVERBAL COMMUNICATION	
CMST 331	INTERVIEWING	
CMST 340	INTERCULTURAL COMMUNICATION	
CMST 420	HEALTH COMMUNICATION	
Major Options–choose one of the four options to complete the BS degree		15-28
Exercise Science		
EXSC 488	PROFESSIONAL INTERNSHIP (variable credit course–must complete 15 credits–minimum grade ≥B)	
Pre–Athletic Training		
EXSC 388	EXERCISE SCIENCE PRACTICUM (must complete 100 hours with Certified Athletic Trainer–must complete 8 credits–minimum grade ≥B required)	
HLED 256	MEDICAL TERMINOLOGY (minimum grade ≥B required)	
PSYC 302	ABNORMAL PSYCHOLOGY (minimum grade ≥B required)	
PHYS 131	INTRODUCTORY PHYSICS I (minimum grade ≥C is required)	
PHYS 161	MECHANICS LABORATORY (minimum grade ≥C is required)	
Pre–Occupational Therapy		
EXSC 388	EXERCISE SCIENCE PRACTICUM (must complete 8 credits–minimum grade ≥B required)	
OCTH 101	INTRODUCTION TO OCCUPATIONAL THERAPY (minimum grade ≥B required)	
PSYC 201	LIFE-SPAN DEVELOPMENT (minimum grade ≥B required)	

PSYC 302	ABNORMAL PSYCHOLOGY (minimum grade ≥B required)	
Pre–Physical Therapy		
EXSC 388	EXERCISE SCIENCE PRACTICUM (must complete 8 credits–minimum grade ≥B required)	
Minimum GPA ≥3.0 required for lecture series (PHYS 131, PHYS 132, PHYS 133)		
PHYS 131	INTRODUCTORY PHYSICS I	
PHYS 132	INTRODUCTORY PHYSICS II	
PHYS 133	INTRODUCTORY PHYSICS III	
PHYS 161	MECHANICS LABORATORY	
PHYS 162	HEAT AND OPTICS LABORATORY	
PHYS 163	ELECTRONICS LABORATORY I	
PSYC 302	ABNORMAL PSYCHOLOGY	
Required Senior Capstone		
EXSC 490	SENIOR CAPSTONE IN EXERCISE SCIENCE (minimum grade ≥C+)	4
Total Credits		90-106

University Competencies and Proficiencies

English (http://catalog.ewu.edu/undergraduate-degree/#newitemtext)

Mathematics (http://catalog.ewu.edu/undergraduate-degree/#mathcompproficienciestext)

Placement and Clearance Exams (http://catalog.ewu.edu/placement/)

Prior Learning/Sources of Credit AP, CLEP, IB (http://catalog.ewu.edu/prior-learning/)

General Education Requirements **(**http://catalog.ewu.edu/undergraduate-degree/#generaleducationrequirementstext**)(GER)**

- Minimum Credits—180 cumulative credit hours
  - 60 upper-division credits (300 level or above)
  - 45 credits in residence (attendance) at Eastern, with at least 15 upper-division credits in major in residence at Eastern
- Minimum Cumulative GPA ≥2.0

Breadth Area Core Requirements (BACR)

Humanities and Arts **(**http://catalog.ewu.edu/undergraduate-degree/#humanitiesandfineartsgecrtext**)**

Natural Sciences **(**http://catalog.ewu.edu/undergraduate-degree/#naturalsciencesgecrtext**)**

Social Sciences **(**http://catalog.ewu.edu/undergraduate-degree/#socialsciencesgecrtext**)**

University Graduation Requirements **(**http://catalog.ewu.edu/undergraduate-degree/#universitygraduationrequirementstext**) (UGR)**

Diversity Course List (http://catalog.ewu.edu/undergraduate-degree/#cultureandgenderdiversityintheuslisttext)

Foreign Language (http://catalog.ewu.edu/undergraduate-degree/#foreignlanguageugrtext) (for Bachelor of Arts)

Global Studies Course List (http://catalog.ewu.edu/undergraduate-degree/#internationalstudiesrequirementtext)

Minor or Certificate (http://catalog.ewu.edu/undergraduate-degree/#majorminororcertificateugrtext)

Senior Capstone Course List (http://catalog.ewu.edu/undergraduate-degree/#capstonecourselisttext)

All admitted students must officially Declare a Major (https://access.ewu.edu/center-for-academic-advising-and-retention/academic-planning-tools/declare-your-major/) by the time they reach 90 credits (junior standing).
Application for Graduation (https://sites.ewu.edu/records-and-registration/files/2017/02/GraduationApp.pdf) must be made at least two terms in advance of the term you expect to graduate (undergraduate and post-baccalaureate).

Use the Catalog Archives (https://catalog.ewu.edu/archives/) to determine two important catalog years *(*http://catalog.ewu.edu/undergraduate-degree/#activecatalogruletext*).* SOAR (https://soar.ewu.edu/selfservice/general/home.html) calculates based on these two catalog years.

1. The catalog *in effect at the student's first term* of current matriculation is used to determine **BACR** (Breadth Area Credit Requirements) **and UGR** (Undergraduate Graduation Requirements).
2. The catalog *in effect at the time the student declares a major or minor* is used to determine the program requirements.

Students who successfully earn a BS in Exercise Science from EWU should be able to do the following:

- be prepared for appropriate certification exams in the industry;
- demonstrate competency in fitness testing of the relatively healthy population in all components of fitness-cardiovascular, muscle strength, endurance, flexibility and body composition;
- demonstrate competency in foundational skills of reading, writing, arithmetic, speaking and listening and thinking skills demonstrating the ability to learn, to reason, to think creatively, to make decisions and to solve problems.