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 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXSC 301</td>
<td>INTRODUCTION TO EXERCISE SCIENCE</td>
<td>1</td>
</tr>
<tr>
<td>EXSC 455</td>
<td>RESEARCH AND ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 460</td>
<td>PHYSIOLOGY OF EXERCISE</td>
<td>4</td>
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<tr>
<td>EXSC 480</td>
<td>CLINICAL EXERCISE PHYSIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>HLED 193</td>
<td>STANDARD FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>HLED 372</td>
<td>APPLIED NUTRITION AND PHYSICAL FITNESS</td>
<td>3</td>
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<tr>
<td>PHED 349</td>
<td>ANATOMICAL KINESIOLOGY</td>
<td>4</td>
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<td>PHED 350</td>
<td>PHYSIOLOGICAL KINESIOLOGY</td>
<td>4</td>
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<tr>
<td>PHED 352</td>
<td>MECHANICAL KINESIOLOGY</td>
<td>4</td>
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</table>

Required Supporting Courses

- Pre-OT and Pre-PT require minimum average GPA ≥3.0 for each series listed below.

<table>
<thead>
<tr>
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<tr>
<td>BIOL 232</td>
<td>HUMAN ANATOMY AND PHYSIOLOGY NON-BIOL MAJORS</td>
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<tr>
<td>&amp; BIOL 233</td>
<td>and HUMAN ANATOMY AND PHYSIOLOGY NON-BIOL MAJORS</td>
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<td>CHEM 161</td>
<td>GENERAL CHEMISTRY FOR THE HEALTH SCIENCES</td>
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<tr>
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<td>&amp; CHEM 163</td>
<td>and BIOCHEMISTRY FOR THE HEALTH SCIENCES</td>
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- Exercise Science and Pre-AT require a minimum grade of ≥C for each course listed below.

Choose one of the following

- 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

- 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

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<tr>
<td>BUE 302</td>
<td>BUSINESS COMMUNICATION</td>
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<tr>
<td>CMST 312</td>
<td>NONVERBAL COMMUNICATION</td>
<td>4</td>
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<tr>
<td>CMST 331</td>
<td>INTERVIEWING</td>
<td>4</td>
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<tr>
<td>CMST 340</td>
<td>INTERCULTURAL COMMUNICATION</td>
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</tr>
<tr>
<td>CMST 420</td>
<td>HEALTH COMMUNICATION</td>
<td>4</td>
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Major Options—choose one of the four options to complete the BS degree

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)

BIOL MAJORS

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<td>GENERAL CHEMISTRY FOR THE HEALTH SCIENCES</td>
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Pre-OT and Pre-PT require a minimum average GPA ≥3.0 for each course listed below.

Exercise Science, Bachelor of Science (BS)
Exercise Science, Bachelor of Science (BS)

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+)

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/#naturalsciencegecrtext)
Social Sciences (http://catalog.ewu.edu/undergraduate-degree/#socialsciencegecrtext)

University Graduation Requirements (http://catalog.ewu.edu/undergraduate-degree/#universitygraduationrequirementstext) (UGR)
Diversity Course List (http://catalog.ewu.edu/undergraduate-degree/#cultureandgenderdiversityinthesuslisttext)
Foreign Language (http://catalog.ewu.edu/undergraduate-degree/#foreignlanguageugtext) (for Bachelor of Arts)
Global Studies Course List (http://catalog.ewu.edu/undergraduate-degree/#internationalstudiesrequirementstext)
Minor or Certificate (http://catalog.ewu.edu/undergraduate-degree/#majorminororcertificateugtext)

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.