

EXERCISE SCIENCE MAJOR, BACHELOR OF SCIENCE (BS)

The Bachelor of Science in Exercise Science offers four tracks and prepares students to work in a variety of health, fitness, wellness, and sports performance environments. Our exercise science track prepares students to work with a range of populations including the general population (i.e., apparently healthy) in commercial fitness and corporate wellness centers, populations with chronic diseases in clinical facilities, and athletes in sports performance settings. Our pre-professional tracks prepare students to apply to graduate programs in allied health care. While our pre-professional tracks are specific to physical therapy, occupational therapy, and athletic training, an increasing number of students use the extensive science requirements to prepare for applications to other programs in allied health care including chiropractic, nursing, and physician's assistant. The degree also lays a strong foundation for graduate degrees in kinesiology and related fields. The course work prepares students to pursue certifications from esteemed organizations in the industry including American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA), National Academy of Sports Medicine (NASM), and the American Council on Exercise (ACE).

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.

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 $\geq C$

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 $\geq B$

Required Core Courses—minimum grade $\geq C+$ for each

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|----------|--|---|
| 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 $\geq C$ 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 $\geq C$

Pre-OT and Pre-PT—minimum grade $\geq B$

CSBS 320 STATISTICS FOR THE SOCIAL SCIENCES

MATH 380 ELEMENTARY PROBABILITY AND STATISTICS

Choose two from the following—minimum grade $\geq C+$ 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 $\geq C$ 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 $\geq B$)

Pre—Athletic Training

EXSC 388 EXERCISE SCIENCE PRACTICUM (must complete 100 hours with Certified Athletic Trainer—must complete 8 credits—minimum grade $\geq B$ required)

HLED 256 MEDICAL TERMINOLOGY (minimum grade $\geq B$ required)

PSYC 302 ABNORMAL PSYCHOLOGY (minimum grade $\geq B$ required)

PHYS 131 INTRODUCTORY PHYSICS I (minimum grade $\geq C$ is required)

PHYS 161 MECHANICS LABORATORY (minimum grade $\geq C$ is required)

Pre—Occupational Therapy

EXSC 388 EXERCISE SCIENCE PRACTICUM (must complete 8 credits—minimum grade $\geq B$ required)

OCTH 101 INTRODUCTION TO OCCUPATIONAL THERAPY (minimum grade $\geq B$ required)

PSYC 201 LIFE-SPAN DEVELOPMENT (minimum grade $\geq B$ required)

PSYC 302 ABNORMAL PSYCHOLOGY (minimum grade $\geq B$ required)

Pre—Physical Therapy

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|---|--|--------|
| EXSC 388 | EXERCISE SCIENCE PRACTICUM (must complete 8 credits—minimum grade \geq B required) | |
| Minimum GPA \geq 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 \geq C+) | 4 |
| Total Credits | | 90-106 |

University Competencies and Proficiencies

English (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#newitemtext>)
 Quantitative and Symbolic Reasoning (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#mathcompufficienciestext>)
 Placement and Clearance Exams (<http://catalog.ewu.edu/archives/2021-2022/placement/>)
 Prior Learning/Sources of Credit AP, CLEP, IB (<http://catalog.ewu.edu/archives/2021-2022/prior-learning/>)

General Education Requirements (<http://catalog.ewu.edu/archives/2021-2022/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 \geq 2.0

Breadth Area Core Requirements (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#generaleducationcorerequirementsgecrtext>) (BACR)

Humanities and Arts (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#humanitiesandfineartsgecrtext>)
 Natural Sciences (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#naturalsciencesgecrtext>)
 Social Sciences (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#socialsciencesgecrtext>)

University Graduation Requirements (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#universitygraduationrequirementstext>) (UGR)

Diversity Course List (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#cultureandgenderdiversityintheuslisttext>)
 Foreign Language (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#foreignlanguageugrtext>) (for Bachelor of Arts)
 Global Studies Course List (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#internationalstudiesrequirementtext>)

Minor or Certificate (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#majorminororcertificateugrtext>)
 Senior Capstone Course List (<http://catalog.ewu.edu/archives/2021-2022/undergraduate-degree/#capstonecourselisttext>)

All admitted students must officially Declare a Major (<https://inside.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 (use EagleNET (<https://inside.ewu.edu/eaglenet/>)) 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/archives/2021-2022/undergraduate-degree/#activecatalogrulerstext>).

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.