

Springfield College Sequencing Guidelines Applied Exercise Science Major (AESC) ▼ 2021-2022

If you entered Springfield College in 2021-2022, use this guide for sequencing your courses. Requirements are subject to change and may not be offered when listed. Use your online degree audit to verify your progress, and always confirm your plans with your advisor.

Core Curriculum Requirements, Electives, and College Requirements

In addition to the major requirements listed below, you will need to fill the following Core Curriculum categories:

- 100-level Wellness & Physical (1 cr)
- Literature (3 cr)
- Spiritual and Ethical (3 cr)
- Aesthetic Expression (3 cr)Historical and Social (3 cr)
- Themed Explorations (9 cr)
 - > 3 different prefixes
 - ➤ I Global course

This major typically requires 72 credits to complete. In addition to the Core Curriculum and major requirements listed, you must complete:

- 14 elective credits or more to total at least 120 credits
- The **residency requirement**—45 credits taken at Springfield College (including 15 of your last 30)

AESC Major Requirements – Typical First-Year Schedule

Fall:

SCSM 101, Springfield College Seminar (Core requirement – 3 cr)

ENGL 113, College Writing I (Core requirement – 3 cr)

AEXS 101, Introduction to Applied Exercise Science (3 cr)

BIOL 130, Anatomy & Physiology Concepts I (3 cr – also fills Scientific Reasoning Core)

BIOL 132, Anatomy & Physiology Concepts I Lab (I cr – also fills Scientific Reasoning Core)

Plus other Core and major requirements, or electives to total approximately 15 credits

Spring:

ENGL 114, College Writing II (Core requirement – 3 cr)

BIOL 131, Anatomy & Physiology Concepts II (3 cr)

BIOL 133, Anatomy & Physiology Concepts II Lab (1 cr)

CHEM 101, Chemistry Survey (3 cr)

CHEM 102, Chemistry Survey Laboratory (1 cr)

Plus other Core and major requirements, or electives to total approximately 30 credits for the year

Fall or Spring:

Quantitative Reasoning Core: MATH 115, College Algebra (3 cr) is recommended, as it's a prerequisite for PHYS 205 (or MATH 125, 131, or 140)

AESC Major Requirements – Typical Second-Year Schedule

Fall or Spring:

AEXS 313, Physiology of Exercise (3 cr- also fills one WAC requirement)

AEXS 315, Physiology of Exercise – Lab (0 cr)

PHYS 205, Physics for Movement Science (3 cr)

PHYS 207, Physics for Movement Science Laboratory (1 cr)

WLPL 225, Becoming Skilled through Strength and Conditioning (1 cr - fills 200-level Wellness and Physical Lit Core)

WLPL 346, Leading in Service: Principles of Group Fitness (1 cr – fills 300-level Wellness and Physical Lit Core)

Plus other Core and major requirements, or electives to total approximately 30 credits for the year

AESC Major Requirements – Typical Third-Year Schedule

Fall or Spring:

AEXS 350, Internship I (2 cr)

Plus other Core and major requirements, or electives to total approximately 30 credits for the year

AESC Major Requirements – Typical Fourth-Year Schedule

Fall or Spring:

AEXS 401, Management of Health/Fitness Programs (3 cr)

AEXS 410, Senior Seminar (3 cr)

AEXS 486, Internship II (9 cr)

Plus other Core and major requirements, or electives to total 120 credits

Additional AESC Major Requirements - Flexible Timing

AEXS 284, On-Campus Practicum (1 cr) – should be taken 1^{st} or 2^{nd} year

AEXS 319, Kinesiology/Biomechanics (3 cr) – after meeting prerequisites AND

AEXS 321, Kinesiology/Biomechanics – Lab (0 cr) AEXS 335, Measurement and Evaluation (3 cr) – can be taken 2^{nd} , 3^{rd} or 4^{th} year

AEXS 360, Exercise Testing and Prescription (3 cr) – should be taken 2nd or 3rd year fall AND AEXS 362, Exercise Testing and Prescription – Lab (0 cr)

AEXS 380, Fundamentals of Training for Health and Performance (3 cr)

AEXS 270, Exercise Psychology (3cr)

AEXS 465, Exercise Testing and Prescription for Special Populations (3 cr) – after meeting prerequisites

AEXS 480, Concepts of Personal Training (3 cr)

NUSC 261, Introduction to Nutrition (3 cr) – should be taken 1^{st} or 2^{nd} year

Select **one** of the following:

NUSC 361, Applied Nutrition (3 cr) – can be taken 2nd year or later; required for optional Fitness Management and Personal Training track

AEXS 540, Sports Nutrition (3 cr) – should only be taken during 4^{th} year

Select **one** of the following:

AEXS 470, Strength and Conditioning (3 cr) – should take 4^{th} year; required for optional Sports Performance track AND

AEXS 471, Strength & Conditioning Applications – Lab (0 cr)
AEXS 561, Electrocardiogram Interpretation and Graded Exercise
Testing (3 cr) – should only be taken during 4th year AND
AEXS 563, Electrocardiogram Interpretation and Graded
ExerciseTesting – Lab (0 cr)

OPTIONAL Tracks and Concentration

Fitness Management and Personal Training Track:

BUSM 150, Introduction to Business (3 cr – also fills one WAC requirement) SMRT 116, Event Management and Promotions (3 cr)

NUSC 361, Applied Nutrition (3 cr)

BUSM 221, Principles of Marketing (3 cr)

SMRT 350, Marketing and Public Relations for Sport and Recreation Mgt. (3 cr)

BUSM 340, Small Business Management (3 cr)

or

BUSM 375, Entrepreneurial Studies (3 cr – BUSM 210 or instructor permission is prerequisite)

PSYC 320, Health Psychology (3 cr – PSYC 101 is prerequisite)

or

PSYC 418, Behavior Modification (3 cr – PSYC 101 is prerequisite)

Clinical Track:

AEXS 561, Electrocardiogram
Interpretation and Graded Exercise
Testing (3 cr) AND AEXS 563,
Electrocardiogram Interpretation and
Graded Exercise Testing – Lab (0 cr)
BIOL 121/123, Bioscience I (3 cr) and
Laboratory (1 cr)

BIOL 122/124, Bioscience II (3 cr) and Laboratory (1 cr)

BIOL 250/252, Human Anatomy and Physiology I (3 cr) and Laboratory (1 cr) BIOL 251/253, Human Anatomy and Physiology II (3 cr) and Laboratory (1 cr) CHEM 121/123*, General Chemistry I (3 cr) and Laboratory (1 cr) CHEM 122/124, General Chemistry II (3 cr) and Laboratory (1 cr) PHYS 210, General Physics I* (4 cr)

*CHEM 121/123 will substitute for CHEM 101/102 and PHYS 210 will substitute for PHYS 205/207. Note that MATH 125, Precalculus, is prerequisite for PHYS 210.

PHYS 211, General Physics II (4 cr)

Strength and Conditioning Concentration:

AEXS 470, Strength & Conditioning (3 cr) AND AEXS 471, Strength & Conditioning Applications – Lab (0 cr)

AEXS 540, Sports Nutrition (graduate-level course, 3 cr)

MOST 105, Lifespan Motor Development (3 cr)

MOST 224, Motor Learning and Skill Acquisition (3 cr)

MOST 328, Psychology of Sport (3 cr) PHED 212, Principles and Problems of Coaching (2 cr)

PSYC 101, Intro to Psychology (3 cr)

Select **one** of the following: PSYC 209, Social Psychology (3 cr) PSYC 530, Psychology of Sport Injury (3 cr)

AESC Major – Program Standards

Program standards for the AESC major include, but are not limited to:

- A minimum cumulative GPA of 2.750
- A grade of C- or better in all courses with an AEXS prefix
- Earning 10.0 professional developments points (PDPs) through the course of each calendar year, as outlined in the PDP Guideline

For more information about these and other program standards, contact your advisor or the AESC program coordinator.