

# Exercise Science (BS)

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*This program is offered by the College of Science and Health/ Natural Sciences and Mathematics Department and is only available at the St. Louis main campus.*

## Program Description

The bachelor of science (BS) in exercise science provides an excellent academic foundation for students choosing to pursue graduate and professional degrees in a wide array of health careers, such as exercise physiology, occupational therapy, physical therapy, medicine and athletic training. Because these fields require post-baccalaureate degrees, students will need to take additional prerequisites that apply to their field of interest. Students who choose not to pursue a post-baccalaureate degree can pursue a career as a personal trainer, wellness coordinator, strength and conditioning coach or in corporate wellness.

## Learning Outcomes

Upon completion of the exercise science program, students will be able to:

- Demonstrate basic knowledge of biology, chemistry and physics.
- Demonstrate basic knowledge of human movement.
- Demonstrate knowledge of effective analysis of kinesiology concepts.
- Demonstrate skill in applied kinesiology, in the effective use of problem-solving techniques and in intelligent decision-making skills in clinical settings.
- Demonstrate tolerance and understanding of diverse populations, responsible citizenship, a professional attitude, and ethical behavior.

## Degree Requirements

For information on the general requirements for a degree, see Baccalaureate Degree Requirements under the Academic Policies and Information section of this catalog.

- 71 required credit hours
- Applicable University Global Citizenship Program hours
- Electives

Students must complete all courses in the major with a grade of C- or better.

## Curriculum

The 71 credit hours required for the exercise science major include the following:

- BIOL 1550 Essentials of Biology I (4 hours)  
and BIOL 1551 Essentials of Biology I: Lab (1 hour)
- BIOL 2350 Nutrition (3 hours)
- BIOL 1610 Anatomy & Physiology I (3 hours)  
and BIOL 1611 Anatomy & Physiology I: Lab (1 hour)
- BIOL 1620 Anatomy & Physiology II (3 hours)  
and BIOL 1621 Anatomy & Physiology II: Lab (1 hour)
- BIOL 4400 Research Methods (3 hours)
- BIOL 4430 Senior Thesis for BS in Biological Science (4

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- BIOL 1550 Essentials of Biology I (4 hours)  
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- BIOL 1610 Anatomy & Physiology I (3 hours)  
**and** BIOL 1611 Anatomy & Physiology I: Lab (1 hour)
- BIOL 1620 Anatomy & Physiology II (3 hours)  
**and** BIOL 1621 Anatomy & Physiology II: Lab (1 hour)
- BIOL 4400 Research Methods (3 hours)
- BIOL 4430 Senior Thesis for BS in Biological Sciences (4 hours)
- EXSC 1318 Careers in Exercise Science (1 hour)
- EXSC 1400 Foundations of Exercise Science (3 hours)
- EXSC 2100 Coaching Health and Human Performance (2 hours)
- EXSC 2356 Principles of Athletic Training (3 hours)
- EXSC 3050 Exercise Physiology (3 hours)
- EXSC 3250 Kinesiology (3 hours)  
**and** EXSC 3251 Exercise Kinesiology: Lab (1 hour)
- EXSC 4680 Exercise Prescription and Testing (3 hours)  
**and** EXSC 4681 Exercise Testing and Prescription: Lab (1 hour)
- EXSC 4683 Exercise Prescription for Special Populations (3 hours)
- EXSC 4875 Exercise Science Internship (3 hours)
- CHEM 1100 General Chemistry I (3 hours)  
**and** CHEM 1101 General Chemistry I: Lab (1 hour)
- CHEM 1110 General Chemistry II (3 hours)  
**and** CHEM 1111 General Chemistry II: Lab (1 hour)
- PHYS 1710 College Physics I (3 hours)  
**and** PHYS 1711 College Physics I: Lab (1 hour)
- PHYS 1720 College Physics II (3 hours)  
**and** PHYS 1721 College Physics II: Lab (1 hour)