Exercise Science

The Exercise Science major focuses on the study of human movement, physical activity, and their impact on health and performance. Students gain knowledge in anatomy, physiology, biomechanics, and exercise programming to help individuals improve fitness, rehabilitate injuries, and enhance athletic performance. Graduates often work in industries such as fitness and wellness, sports performance, healthcare, and rehabilitation, with roles including personal trainer, strength and conditioning coach, exercise physiologist, or wellness coordinator. This major also provides a strong foundation for advanced studies in physical therapy, occupational therapy, or other allied health professions.

Job Title Examples:

- Personal Trainer
- Fitness Specialist
- Strength and Conditioning Coach
- Wellness Coordinator
- Exercise Physiologist
- Rehabilitation Assistant
- Health Coach
- Sports Performance Trainer
- Athletic Trainer
- Corporate Wellness Specialist

Hard and Soft Skills Needed:

Hard Skills:

- 1. Anatomy and Physiology Knowledge
- 2. Exercise Programming and Design
- 3. Biomechanics Analysis
- 4. CPR and First Aid Certification
- 5. Data Analysis for Fitness Assessments

Soft Skills:

- 1. Communication
- 2. Leadership
- 3. Problem-Solving
- 4. Adaptability
- 5. Team Collaboration



Further Education/Training Required and/or Suggested:

A BS in Exercise Science qualifies students for entry-level roles, but certifications or additional training are often required for specific careers:

To Enter the Field:

- 1. Certifications (e.g., ACSM, NASM, or NSCA):
 - o Required for roles as personal trainers, fitness specialists, or strength and conditioning coaches.
- 2. CPR/AED Certification:
 - Common requirement for fitness and wellness jobs.

To Advance:

- 1. Graduate Degree (e.g., PT, OT, or Exercise Physiology):
 - Needed for advanced clinical or specialized roles.
- 2. Specialized Certifications (e.g., CSCS, CES):
 - o To specialize in areas like rehabilitation, sports performance, or corrective exercise.

Summary:

Certifications like ACSM-CPT or NSCA-CSCS are essential for entry-level roles, while graduate degrees and specialized credentials can aid career advancement.

Professional or Student Associations:

- The Exercise Science Club at WKU
- American College of Sports Medicine (ACSM)
- National Strength and Conditioning Association (NSCA)
- American Council on Exercise (ACE)
- National Athletic Trainers' Association (NATA)

