

Western Tech's Sports Science Academy

The Western Tech Sports Science Academy is a comprehensive magnet program geared toward students who have a passion for science and sports and are interested in pursuing a sport science-related career. In this program, students participate in thought-provoking class discussions, examine current events in the world of sports and science, participate in field activities, interact with guest speakers from the world of sports, and work on a variety of service projects. This program is designed to prepare students for college and careers in the 21st Century.

9th Grade:

Intro to Paramedical Biology

This class covers a variety of injuries and conditions so students can become familiar with techniques and methods used by first responders. Students will use scientific principles and apply knowledge of human anatomy and physiology in response to emergencies, both on the field of play and off.

10th Grade:

Anatomy and Physiology/Sports Medicine

This class covers the basics of human anatomy and physiology including anatomical terminology, basic biochemistry, cells and tissues, and the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, and reproductive systems. The sports medicine component will teach students sport science, as it relates to therapeutic careers, medical terminology, anatomy and physiology, first aid, injury prevention principles, the healing process, rehabilitation techniques, and therapeutic modalities.

Sports Psychology (Semester 1)

This class teaches students the theories, concepts, and intervention techniques of sport psychology. Topics will include motivation theory applied to sports, team dynamics, psychological skills training, the psychology of sporting injuries, and burnout in sports. Students will apply this knowledge to the field of exercise physiology to demonstrate the mind and body link in sports and exercise.

Weight Training (Semester 2)

This class teaches students the proper use of strength training and cardiovascular machines. Students will also learn exercise program development and concepts of sports nutrition.

11th Grade:

Physical Education and Health Leadership

In this course, students will demonstrate their leadership skills by co-teaching a class with one of the Physical Education teachers. Students will use the theories and concepts learned in the program to facilitate class activities.

12th Grade:

Senior Independent Internship, Advanced Placement Courses at Western Tech, and/or Concurrent Enrollment with CCBC

Students will have an opportunity to participate in a senior independent internship, take Advanced Placement classes at Western Tech, and/or participate in concurrent classes at The Community College of Baltimore County. Those students wishing to pursue an internship will engage in program-related activities that allow them to work with industry leaders in a manner that permits them to apply their knowledge to real-world activities and further develop their skill set.



*Western School of Technology and Environmental Science
100 Kenwood Avenue, Catonsville, MD 21228
(443) 809-0840 | <https://westernhs.bcps.org>*