SPORTS SCIENCE, M.S.

The **Sports Science major** at Marshall University, housed within the School of Health and Movement Sciences (SHMS), integrates exercise science, biomechanics, physiology, and technology to optimize athletic performance and human movement. Designed for students passionate about enhancing sports performance through data-driven decision-making, this program provides a comprehensive understanding of the physiological, biomechanical, and psychological factors influencing athletic success.

Students engage in cutting-edge coursework and hands-on experiences, utilizing technology, like athlete monitoring technologies, GPS tracking, force platforms, and metabolic testing, to analyze and enhance performance. The curriculum emphasizes sports analytics, training program design, and physiological assessment, preparing students for careers in strength and conditioning, performance analysis, injury prevention, and applied sports research.

Graduates of the Sports Science major are well-positioned to work with collegiate and professional sports teams, sports performance labs, private training facilities, and tactical athlete programs. Additionally, this program provides an excellent foundation for those pursuing advanced degrees in sports science, biomechanics, athletic training, or physical therapy. With a strong emphasis on innovation, research, and evidence-based practice, this program equips students with the expertise to push the boundaries of human performance and athlete development.

Admission Requirements

Prospective students must meet the minimum criteria listed below to be considered for admission to the program:

- Admission to Marshall University Graduate School,
- Declare a Health and Movement Sciences major of biomechanics, exercise physiology, sports science, or strength and conditioning,
- An Undergraduate Grade Point Average of 2.75 or higher on a 4.0 scale for all previously completed undergraduate university work,
- An appropriate undergraduate/graduate background that includes human anatomy, human physiology, exercise physiology, and physics,
- Three letters of reference;
- Personal statement; and
- A scholarly writing sample.

Acceptance into the M.S. Health and Movement Sciences program is competitive and not guaranteed.

Students are restricted to twelve semester hours of transfer credit from other institutions and limited to a maximum of nine semester hours taught at the 500 level.

Graduation Requirements

Completion of one of the following approved by your academic advisor:

(1) thesis HS 681 Thesis

(2) oral presentation of internship HS 660 Internship& pilot research project

(3) graduate project

Course Requirements

Code	Title	Credit Hours
DTS 671	Sports Nutrition	3
ESS 621	Adv Exercise Physiology I	3
ESS 642	Devise Train & Cond Prog	3
ESS 670	Research Meth in Kinesiology	3
HS 505	Sport Psychology	3
HS 566	Biomechanical Analysis	3
HS 576	Seminar in Sports Science	3
HS 665	Sports Science Practicum	3
STA 518	Biostatistics	3
Restricted Elective		3
HS 681	Thesis	6
or HS 660	Internship	
Total Credit Hours		**36**

Plan of Study

First Year

First Semester		**Credit Hours**
ESS 670	Research Meth in Kinesiology	3
ESS 621	Adv Exercise Physiology I	3
HS 566	Biomechanical Analysis	3
	Credit Hours	**9**
Second Semester		
DTS 671	Sports Nutrition	3
HS 505	Sport Psychology	3
ESS 642	Devise Train & Cond Prog	3
	Credit Hours	**9**
Second Year		
First Semester		
HS 665	Sports Science Practicum	3
HS 576	Seminar in Sports Science	3
Restricted Elective		3
	Credit Hours	**9**
Second Semester		
HS 681 or HS 660	Thesis or Internship	6
STA 518	Biostatistics	3
	Credit Hours	**9**
	Total Credit Hours	**36**