

Coaching and Performance Science, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

This major prepares you to work with high-performance athletes in the athletic or tactical contexts, or with recreational participants in community or club leagues. As a profession, coaching has evolved well beyond merely teaching skills and strategy to athletes. Today, coaches need to evaluate and monitor athlete performance from the perspective of both a sport scientist and a sport pedagogist. The Coaching and Performance Science major is designed to provide a pedagogical foundation whether coaching “on-field” or “off-field” coaching (e.g., strength and conditioning, athlete performance and recovery). Students will complete an area of emphasis in one of the following areas: Coaching and Leadership or Strength and Conditioning. The Strength and Conditioning AoE is a CASCE-accredited program which ensures students can take the Certified Strength and Conditioning Specialist® (CSCS) exam.

The Coaching and Leadership area focuses on the development of domain-specific and underlying scientific content knowledge as well as the essential interpersonal and intrapersonal skills necessary for quality teaching and leadership within the sport context. The program challenges students to focus on their personal and professional foundation and ongoing development through the integration of applied sport science and hands-on application in coaching.

The Strength and Conditioning area of emphasis concentrates on the science of training, designing training prescriptions, athlete monitoring and performance assessment, and better overall steering of the training/recovery process. Students complete a 300-hour in-person internship with high school and collegiate athletic teams as part of the capstone experience.

Admissions for 2026-2027

First-Time Freshmen who meet the University requirements are directly admitted into the Coaching and Performance Science program.

Students admitted from other majors within WVU must be in good academic standing (2.0 GPA).

Students transferring from another institution must be in good academic standing (2.0 GPA).

Major Code: 5510

Degree Requirements

Code	Title	Hours
	University Requirements	65
	Career and Professional Development Sequence	0
	Coaching and Performance Science Major Requirements	55
	Total Hours	120

University Requirements

Code	Title	Hours
	General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
	Outstanding GEF Requirements 1, 2, 3, 5, 6, and 8	30
CAHS 191	First-Year Seminar	2
	General Electives	33
	Total Hours	65

Professional and Career Development Sequence

Code	Title	Hours
Course Sequence		
CAHS 191	First-Year Seminar	
CAHS 300	Career Exploration in Applied Human Sciences	
Select one of the following:		
ACE 475	Capstone Strength and Conditioning	

CAHS 489	Capstone Experience in AHS	
Total Hours		0

Coaching and Performance Science Major Requirements

Code	Title	Hours
ACE 149	Introduction to Applied Anatomy	3
PET 175	Motor Development	2
PET 215	Adapted Sports and Physical Activity for All Learners (GEF 7)	3
PET 244	Motor Learning and Performance	2
ACE 256	Foundations of Coaching	3
SEP 272	Introduction to Sport and Performance Psychology (GEF 4)	3
CAHS 300	Career Exploration in Applied Human Sciences	3
ACE 307	Applied Sport Physiology	3
ACE 310	Coaching Pedagogy	3
ACE 327	Applied Biomechanics	3
ACE 369	Foundations of Strength and Conditioning	3
ACE 410	Training Theories for Coaches	3
ACE 430	Coaching Program Administration	3
PET 477	Adapted Sports and Physical Activity Practicum	3
Complete one of the following Areas of Emphasis (AoE)		15
Coaching & Leadership		
Strength and Conditioning		

Total Hours		55
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Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)		3 GEF 3	3
SEP 272 (GEF 4)		3 ACE 149	3
GEF 2		3 PET 244	2
GEF 5		3 ACE 256	3
PET 175		2 ENGL 102	3
CAHS 191		2	
		16	14

Second Year

Fall	Hours	Spring	Hours
PET 215 (GEF 7)		3 GEF 2	3
ACE 307		3 ACE 327	3
ACE 310		3 ACE 369	3
CAHS 300		3 Complete one of the following AoE courses:	3
Elective		3 ACE 265	
		ACE 257	
		General Elective	3
		15	15

Third Year

Fall	Hours	Spring	Hours
GEF 8		3 ACE 410	3
Complete one of the following AoE courses:		3 PET 477	3
CDFS 412 or 410		Complete one of the following AoE courses:	3
ACE 371		SEP 385	
Complete one of the following AoE courses:		3 HN&F 200	

SEP 350	General Electives	6
ACE 387		
General Electives	6	
		15
		15
Fourth Year		
Fall	Hours	Spring
		Hours
GEF 6		3 GEF 8
GEF 8		3 General Electives
ACE 430		3
Complete one of the following:		3
CAHS 489		
ACE 475		
General Electives		3
		15
		15

Total credit hours: 120

Areas of Emphasis Offered:

- Coaching and Leadership (p. 3)
- Strength and Conditioning (p. 3)

Coaching and Leadership Area of Emphasis

Code	Title	Hours
ACE 265	Sport is Life	3
SEP 350	Leadership Theory and Application in Sport	3
SEP 385	Performance Psychology of Teams and Groups	3
CDFS 412	Adolescent Development	3
or CDFS 410	The Science of Positive Youth Development	
CAHS 489	Capstone Experience in AHS	3
Total Hours		15

Strength and Conditioning Area of Emphasis

Code	Title	Hours
HN&F 200	Nutrition/Activity/Health	3
ACE 257	Assessment and Monitoring in Strength and Conditioning	3
ACE 371	Coaching and Cueing in Strength and Conditioning	3
ACE 387	Periodization and Programming in Strength and Conditioning	3
ACE 475	Capstone Strength and Conditioning	3
Total Hours		15

Major Learning Outcomes

COACHING AND PERFORMANCE SCIENCE

The goal of the program is for students to graduate with the essential skills and knowledge to work with athletes in a variety of contexts across their lifetime.

By the completion of the program, graduates:

1. will integrate disciplinary knowledge, skills, and dispositions and apply them to professional issues in coaching and performance science.
2. will reflect on their professional readiness and think critically about the continued refinement of the disciplinary knowledge, skills, and dispositions learned across the curriculum in coaching and performance science.
3. will model professional and ethical behaviors that are consistent with industry standards and the related recommendations for best practice learned across coaching and performance science.

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4. will demonstrate the ability to evaluate and integrate best practices for assessing athlete needs and designing, implementing, and evaluating practice plans.