

# EXERCISE SCIENCE MAJOR, SPORT SCIENCES CONCENTRATION – B.S.

The sport sciences concentration provides students with a theoretical understanding of the biomechanical, neuromuscular, physiological, and psychological responses and adaptations to exercise. Through concentration specific courses, electives, and research experiences, an exercise science degree with a sport sciences concentration specifically prepares students for specialized graduate training in such fields as biomechanics, ergonomics, exercise physiology, prosthetics, physiology, and sport psychology. The concentration also prepares students for direct entry into exercise science related careers, such as fitness management, fitness journalism, coaching, and pharmaceutical or medical equipment sales.

## Summary

Code	Title	Credits
General requirements		14-15
Basic and Applied Sciences		47
ESS Sport Sciences concentration		18
Integrative Core Curriculum <sup>1</sup>		25-29
Free electives		16
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> Please refer to "ICC (<https://catalog.ithaca.edu/undergrad/schools/school-health-sciences-human-performance/#integrativecorecurriculumicctext>)" tab on our school's main page to see requirements. (EXSS 37500 will satisfy Quantitative Literacy and Writing Intensive; EXSS 47700 will satisfy ICC Capstone.)

## Degree Requirements

Code	Title	Credits
<b>GENERAL REQUIREMENTS</b>		
Select one of the following:		
MATH 10400	Finite Mathematics with Calculus	
MATH 10800	Applied Calculus	
MATH 11100	Calculus I	
Select one of the following:		3-4
MATH 14400	Statistics for Business, Economics and Management	
MATH 14500	Statistics for the Health, Life, and Social Sciences	
MATH 15500	Basic Statistical Reasoning	
PSYC 20700	Statistics in Psychology	
And		
PHYS 10100	Introduction to Physics I	4
<b>BASIC AND APPLIED SCIENCES</b>		
HLTH 20200	Human Nutrition	3
EXSS 12000	Anatomy and Physiology I <sup>1</sup>	4
EXSS 12100	Anatomy and Physiology II <sup>1</sup>	4

EXSS 12500	Foundations of Human Performance and Wellness (Foundations of Human Performance and Wellness )	2
EXSS 20200	Sport and Exercise Psychology	3
EXSS 22000	Kinesiology	4
EXSS 24600	Prevention and Care of Athletic Injuries	3
EXSS 30600	Biomechanical Principles of Human Movement	4
EXSS 32000	Neuromuscular Control	3
EXSS 32100	Exercise Physiology <sup>1</sup>	4
EXSS 47500	Research Team I: Exercise and Sport Sciences	3
EXSS 47700	Research Team II	3
<b>ESS SPORT SCIENCES CONCENTRATION</b>		
Select 18 credits of the following:		18
EXSS 26200	Personal Training	
EXSS 26400	Strength and Conditioning Foundations	
EXSS 40400	Leadership and Team Building in Exercise and Sport	
EXSS 40500	Applied Techniques in Sport Psychology	
EXSS 42100	Advanced Study in Exercise Physiology	
EXSS 42200	Exercise and Rehabilitation Psychology	
EXSS 43600	Sport and Exercise Counseling	
EXSS 44700	Pathophysiology, Limited Capacity and Exercise	
EXSS 46400	Cardiopulmonary Assessment for Exercise	
BIOL 11900	Fundamentals of Biology: Cells and Bodies	
BIOL 12000	Fundamentals of Biology: Ecology and Evolution	
BIOL 12100	Principles of Biology, Cell and Molecular	
BIOL 12200	Principles of Biology, Ecology and Evolution	
CHEM 12100	Principles of Chemistry	
CHEM 12200	Principles of Chemistry Laboratory	
CHEM 11200	Organic Chemistry and Biochemistry	
CHEM 11400	Chemistry Laboratory	
CHEM 12400	Experimental Chemistry I	
CHEM 22500	Experimental Chemistry II	
CHEM 22100	Organic Chemistry I	
CHEM 22200	Organic Chemistry II	
CHEM 23200	Quantitative Chemistry	
PHYS 10200	Introduction to Physics II	
or Any minor		
<b>Total Credits</b>		<b>65-66</b>

<sup>1</sup> Satisfies Complementary Liberal Arts requirement.