

# EXERCISE SCIENCE MAJOR, STRENGTH & CONDITIONING CONCENTRATION – B.S.

The strength and conditioning concentration provides students with a theoretical understanding of the biomechanical, neuromuscular, physiological, and psychological responses and adaptations to exercise. Through concentration specific courses, electives, fieldworks, and internships, an exercise science degree with a strength and conditioning concentration provides students with the skills to assess physical function and the knowledge to improve sport performance through advanced strength, speed, power, agility, and balance training. Graduates typically work as strength and conditioning specialists and coaches at high schools, colleges, universities, and private training facilities. They also work as personal trainers and business owners, and successfully enter graduate and professional schools.

## Summary

Code	Title	Credits
General Requirements		7-8
Basic and Applied Sciences		40
ESS Strength and Conditioning concentration		26-32
Integrative Core Curriculum <sup>1</sup>		19
Free electives		22-29
<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.

## Degree Requirements

Code	Title	Credits
<b>GENERAL REQUIREMENTS</b>		
PHYS 10100	Introduction to Physics I	4
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	
PSYC 20700	Statistics in Psychology	
MATH 15500	Basic Statistical Reasoning	
<b>BASIC AND APPLIED SCIENCES</b>		
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 & 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 42100	Advanced Study in Exercise Physiology	3
EXSS 42200	Exercise and Rehabilitation Psychology	3
HLTH 20200	Human Nutrition	3

### ESS STRENGTH AND CONDITIONING CONCENTRATION

EXSS 17300	Fieldwork in Exercise Science I	1
EXSS 26200	Personal Training	3
EXSS 26400	Strength and Conditioning Foundations	3
EXSS 26500	Practicum in Strength and Conditioning I	1
EXSS 37500	Research Methods in Exercise and Sport Sciences	3
EXSS 38400	Practicum in Strength and Conditioning II	1
EXSS 38500	Practicum in Strength and Conditioning III	1
EXSS 46600	Administration, Mentoring, and Professional Preparation	3
EXSS 39000	Advanced Strength and Conditioning (Advanced Strength & Conditioning)	3
EXSS 47000	Applied Practice in Strength and Conditioning (Applied Practice in S&C)	1
EXSS 47300	Internship: Strength and Conditioning <sup>2</sup>	6-12
<b>Total Credits</b>		<b>73-80</b>

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

<sup>2</sup> Counts as ICC Capstone.