

EXERCISE SCIENCE (B.S.)

Exercise Science is a multi-disciplinary program that applies scientific knowledge from anatomy, physiology, biology, chemistry, psychology, motor control, and biomechanics to understand how the human body functions during physical activity, and how the body adapts to exercise training. The goal of the Exercise Science Program is to prepare competent entry-level Exercise Science professionals in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. In doing so, students acquire skills in fitness evaluation, exercise program design, and instructing functional movement patterns. Graduates will be ready to join the workforce as exercise physiologists, strength and conditioning specialists, and/or wellness coordinators who design and implement safe and effective exercise programs for a wide range of individuals. Graduates are also ideally prepared to pursue graduate education in a wide range of allied health science careers. Please visit the Exercise Science program page (<https://www.montclair.edu/kinesiology/academic-programs/bs-in-exercise-science/>) for more information about advising and potential career paths.

Unless otherwise noted, 120 credits of coursework is required for a baccalaureate degree with a minimum 2.0 overall GPA, and a minimum 2.0 major GPA.

For details about this program, including program description, admission requirements, and contact information, click here (<https://www.montclair.edu/academics/programs/bs-exercise-science/>).

Degree Requirements Overview

Code	Title	Credits
New Student Seminar (fulfilled in the major)		
SEEDS: General Education Requirements		21-24
Major Requirements		71
Free Electives		28-25
Total Credits		120

Program Requirements

Code	Title	Credits
Major Core		
HLTH 101	Personal Health Issues	3
EXSC 150	Principles and Practices of Risk Management for Exercise Science	3
HPEM 199	Freshman Seminar in Health and Physical Education	1
EXSC 255	Research Methods and Data Interpretation	3
PEMJ 320	Physiology of Exercise	4
PEMJ 321	Kinesiology	3
PEMJ 324	Basic Motor Learning	3
EXSC 131	Fitness Concepts	3
EXSC 234	Leadership in Anaerobic Exercise	3
EXSC 331	Exercise Assessment and Prescription	4
EXSC 420	Theoretical Foundations of Sports Conditioning	3
EXSC 430	Exercise for Special Populations	3
EXSC 475	Foundations and Practices in Cardiac Rehabilitation	3
EXSC 476	Seminar in Exercise Science	3

EXSC 480	Internship in Exercise Science	3
Collateral Requirements		
PSYC 101	Introduction to Psychology	3
NUFD 182	Nutrition: A Socioecological Perspective	3
BIOL 244	Anatomy and Physiology I	4
BIOL 245	Anatomy and Physiology II	4
STAT 109	Statistics	3
Major Electives		
Complete 9 credits from the list below.		9
Total Credits		71

Major Electives

Code	Title	Credits
ATTR 402	Clinical Anatomy	3
BIOL 112	Principles of Biology: Introduction to the Cell	4
BIOL 255	Survey of Microbiology	4
CHEM 106	Principles of Chemistry	3
CHEM 113	Fundamentals of Chemistry	4
CHEM 114	Fundamentals of Chemistry for Nursing	3
CHEM 120	General Chemistry I	4
EXSC 270	Nutrition for Fitness	3
HLTH 105	Medical Terminology	3
HPEM 356	Management of Health, Physical Education, Athletics and Fitness Programs	3
NUFD 295	Nutrition and Physical Activity for Older Adults	3
NUFD 388	Nutrition for Community Fitness Programs	3
NUFD 468	Sports Nutrition	3
NURS 220	Human Growth and Development Across the Lifespan	3
PEMJ 152	Introduction to Fielding and Target Games	3
PEMJ 153	Introduction to Invasion and Net Games	3
PEMJ 226	Coaching Principles and Problems	3
PEMJ 351	Adapted Physical Education	4
PEMJ 353	Psychology of Sport	3
PEMJ 381	Cooperative Education in Physical Education	4-8
PEMJ 399	Independent Study in Physical Education	1-6
PEMJ 447	Advanced Coaching Techniques	3
PEMJ 492	Special Topics in Physical Education	1-3
PHYS 193	College Physics I	4
PSYC 203	Introduction to Psychological Research	3
PSYC 320	Developmental Psychology I	3
PSYC 365	Abnormal Psychology	3

SEEDS General Education Requirements

Click here for a list of courses that fulfill the SEEDS requirements. (<http://catalog.montclair.edu/programs/seeds-general-education-requirements/>)

Code	Title	Credits
Foundations		
<i>Effective Writing I</i>		
Complete one Effective Writing I course.		3
<i>Effective Writing II</i>		
Complete one Effective Writing II course.		3

<i>Interactive Communication</i>		
Complete one Interactive Communication course.	3	
<i>Quantitative Reasoning</i>		
Fulfilled by STAT 109 in the major.		
<i>Political and Civic Life</i>		
Complete one Political and Civic Life course.	3	
<i>World Language</i>		
Complete two sequential classes in one World Language when starting at the Beginner I or Beginner II level. Complete one class when starting at the Intermediate/Advanced Level.	3-6	
Exploration		
Complete one course from four different Exploration categories:	6	
<i>Analyzing Cultures and Societies</i>		
Fulfilled by NUFD 182 in the major.		
<i>Creative Expression</i>		
<i>Ethical Inquiry</i>		
<i>Historical Thinking</i>		
<i>Literary and Artistic Analysis</i>		
<i>Scientific Reasoning</i>		
Fulfilled by BIOL 244 in the major.		
Total Credits	21-24	

Recommended Roadmap to Program of Study Completion

This recommended degree plan is provided as an outline for students to follow in order to complete their program of study requirements within **four years** and 120 credits. This plan is a recommendation and must be used in consultation with their academic advisor. Important note: Students should be aware this plan assumes no pre-requisite coursework is required. If pre-requisite coursework is needed, students may have additional requirements to fulfill which do not appear on the plan.

First Year

Fall	Credits Spring	Credits
SEEDS: Effective Writing I	3 SEEDS: Effective Writing II	3
HPEM 199	1 BIOL 245	4
EXSC 131	3 STAT 109	3
BIOL 244 (Fulfills SEEDS: Exploration - Scientific Reasoning)	4 Major Elective 1	3
EXSC 150	3 Free Elective	3
	14	16

Second Year

Fall	Credits Spring	Credits
SEEDS: World Language 1	3 SEEDS: World Language 2	3
PSYC 101	3 SEEDS: Political and Civic Life	3
EXSC 255	3 SEEDS: Exploration 2	3
NUFD 182	3 PEMJ 320	4
Major Elective 2	3 Major Elective 3	3
	15	16

Third Year

Fall	Credits Spring	Credits
PEMJ 324	3 SEEDS: Interactive Communication	3
EXSC 331	4 PEMJ 321	3
EXSC 234	3 EXSC 430	3
HLTH 101	3 Free Elective	3
Free Elective	3 Free Elective	3
	16	15

Fourth Year

Fall	Credits Spring	Credits
EXSC 420	3 EXSC 480	3
EXSC 475	3 SEEDS: Exploration 4	3
EXSC 476	3 Free Elective	4
SEEDS: Exploration 3	3 Free Elective	3
Free Elective	3	
	15	13

Total Credits 120