EXERCISE SCIENCE (MS)

Take the next step towards a career in rehabilitation, sports medicine, strength and conditioning, or clinical exercise physiology.

While a bachelor's degree in exercise science is sufficient to get an entry-level position, continuing education in exercise science is a must to advance in the field. At Loyola, you can earn a master's degree in exercise science and graduate better prepared to start your career in rehabilitation, sports medicine, strength and conditioning, or clinical exercise physiology.

Picture yourself helping people make positive lifestyle choices for their health, whether it's serving injured athletes, those living with primary disabilities, or the general public. A Masters Degree in Exercise Science affords you access to professionally accredited certifications, jobs with top-level employers, and a career that sets you above the rest if continuing to a terminal degree (e.g. Doctor of Physical Therapy, Ph.D., Physicians Assistant, etc.).

Related Programs

Master's

- Dietetics (MS) (https://catalog.luc.edu/graduate-professional/health-sciences/dietetics-ms/)
- Health Informatics (MS) (https://catalog.luc.edu/graduate-professional/health-sciences/health-informatics-ms/)

Certificate

- Health Informatics Certificate (https://catalog.luc.edu/graduate-professional/health-sciences/health-informatics-certificate/)

Curriculum

During your first year in this two-year program, you will build a foundation in exercise science-related fields through classroom instruction and lab-based activities. In your second year, you will complete advanced specialty coursework as well as a 200-hour internship and a comprehensive final examination.

MSES Curriculum (36-38 credits)

Pre-Requisites: Anatomy with Lab (4 credits); Physiology with Lab (4 credits); Exercise Physiology (3 credits); Biomechanics or Applied Kinesiology with Lab (4 credits)

Code	Title	Hours
Foundational Coursework		
EXCM 401	Applied Physiology of Exercise	4
EXCM 450	Nutrition, Health and Performance	3
EXCM 475	Exercise Applications in Special Populations	3
EXCM 482	Research Methods and Evidence in Exercise Science	3
Concentrations and Electives (p. 1)		**18-19**
General track must complete a minimum of 18 credit hours of electives (15 of which are EXCM courses) from below.		
Concentrations in Strength and Conditioning and Human Performance or Clinical Exercise Science must complete 13 credit hours of track-specific curricula and a minimum of 6 credit hours of electives (3 of which are EXCM courses) from below.		
Internship Course		
EXCM 495	Advanced Exercise Science Internship	4
Total Hours		**36**

Concentrations & Electives

General track must complete a minimum of 18 credit hours of electives (15 of which are EXCM courses) from below. Concentrations in Strength and Conditioning and Human Performance or Clinical Exercise Science must complete 13 credit hours of track-specific curricula and a minimum of 6 credit hours of electives (3 of which are EXCM courses) from below.

General Track

Code	Title	Hours
MS EXCM General Track-Specific Curricula		**18-19**
Must complete a minimum of 18 credit hours (15 of which are EXCM courses) from below:		
EXCM 424	Motor Learning and Performance	
EXCM 435	Health Promotion and Wellness Theories and Frameworks	
EXCM 444	Strength Training and Conditioning	
EXCM 454	Applied Sports Science	
EXCM 458	Cardiac and Pulmonary Disease and Rehabilitation	
EXCM 468	Application of Advanced Clinical Exercise Testing & Prescription	
EXCM 475	Exercise Applications in Special Populations	
EXCM 478	EKG Interpretation	
EXCM 480	Advanced Exercise Assessment and Programming	
EXCM 485	Applied Biomechanics	
FONU 507	Behavioral Change for Health Promotion	
MHA 405	U.S. Health Systems Management	
MPBH 413	Non-Communicable Disease Epidemiology	
MPBH 431	Grant Writing	

Strength and Conditioning and Human Performance

Code	Title	Hours
MS EXCM Strength and Conditioning and Human Performance Track-Specific Curricula		
EXCM 424	Motor Learning and Performance	3
EXCM 444	Strength Training and Conditioning	3
EXCM 480	Advanced Exercise Assessment and Programming	3
EXCM 485	Applied Biomechanics	4
Electives		
Must complete a minimum of 6 credit hours (3 of which are EXCM courses) from below:		*6*
EXCM 435	Health Promotion and Wellness Theories and Frameworks	
EXCM 454	Applied Sports Science	
EXCM 458	Cardiac and Pulmonary Disease and Rehabilitation	
EXCM 468	Application of Advanced Clinical Exercise Testing & Prescription	
EXCM 478	EKG Interpretation	
FONU 507	Behavioral Change for Health Promotion	
MHA 405	U.S. Health Systems Management	
MPBH 413	Non-Communicable Disease Epidemiology	
MPBH 431	Grant Writing	

Clinical Exercise Science Concentration

Code	Title	Hours
MS EXCM Clinical Exercise Track-Specific Curricula		
EXCM 435	Health Promotion and Wellness Theories and Frameworks	3
EXCM 458	Cardiac and Pulmonary Disease and Rehabilitation	3
EXCM 468	Application of Advanced Clinical Exercise Testing & Prescription	4
EXCM 478	EKG Interpretation	3
Electives		
Must complete a minimum of 6 credit hours (3 of which are EXCM courses) from below:		*6*
EXCM 424	Motor Learning and Performance	
EXCM 444	Strength Training and Conditioning	
EXCM 454	Applied Sports Science	
EXCM 480	Advanced Exercise Assessment and Programming	
EXCM 485	Applied Biomechanics	
FONU 507	Behavioral Change for Health Promotion	
MHA 405	U.S. Health Systems Management	
MPBH 413	Non-Communicable Disease Epidemiology	
MPBH 431	Grant Writing	

Comprehensive Examination

A comprehensive exam is required for all students. Please contact your Graduate Program Director or visit the EXCM Graduate Student Sakai page for more information.

Graduate & Professional Standards and Regulations

Students in graduate and professional programs can find their Academic Policies in Graduate and Professional Academic Standards and Regulations (https://catalog.luc.edu/academic-standards-regulations/graduate-professional/) under their school. Any additional University Policies supersede school policies.

Learning Outcomes

Upon successful completion of the program, graduates will be able to:

- Conduct comprehensive health and fitness assessments using theories and frameworks.
- Apply scientific principles and evidence-based recommendations into the prescription, implementation, and evaluation of exercise and fitness programs.
- Create lifestyle modification and health promotion plans for individuals and groups.
- Incorporate effective communication and motivational strategies to support clients or patients as they adopt, perform, and maintain a healthy lifestyle.
- Implement role behaviors consistent with the scope of practice of exercise sciences.
- Manage human, fiscal, and physical resources of health fitness facilities and programs.