

# EXERCISE SCIENCE (BS/MS)

Loyola also offers a five-year bachelor to master's program for undergraduate exercise science majors. Accelerate your progress and earn both degrees in just five years (earning the degrees separately takes at least six years).

## CURRICULUM

Code	Title	Hours
<b>Exercise Science Prerequisites</b>		
BIOL 101 & BIOL 111	General Biology I and General Biology I Lab	
BIOL 102 & BIOL 112	General Biology II and General Biology II Lab	
CHEM 160 & CHEM 161	Chemical Structure and Properties and Chemical Structure and Properties Laboratory	
CHEM 180 & CHEM 181	Chemical Reactivity I and Chemical Reactivity I Lab	
PSYC 101	General Psychology	
STAT 103	Fundamentals of Statistics	
PSYC 273	Developmental Psychology	
GNUR 155 & 155L	Human Anatomy and Human Anatomy Lab	
GNUR 156 & 156L	Human Physiology and Human Physiology Lab	
PHYS 111 & 111L	College Physics I Lec / Dis and College Physics Laboratory I	
PHYS 112 & 112L	College Physics II Lec/Disc and College Physics Lab II	
EXCM 101	Introduction to Exercise Physiology	
EXCM 201	Physiology of Exercise	
<b>Exercise Science Major Course</b>		
EXCM 210	Program Design in Exercise	2
EXCM 301	Advanced Physiology of Exercise	3
EXCM 342	Physical Growth, Development and Nutrition	3
EXCM 345	Therapeutic Exercise and Rehabilitation	3
EXCM 364	Intro to Clinical Exercise Testing and Prescription	3
EXCM 368	Advanced Clinical Testing and Prescriptions	3
EXCM 375	Special Populations in Exercise Science	2
EXCM 382	Clinical Research: Methods, Design and Ethics w/ Lab	3
EXCM 385	Kinesiology and Sports Biomechanics w/Lab	4
EXCM 387	Movement Anatomy in Exercise	3
EXCM 390	Psychology of Health and Exercise	3
EXCM 395	Clinical Internship and Patient Management	6
<b>Exercise Science MS Courses</b>		
EXCM 401	Applied Physiology of Exercise	4
EXCM 435	Health Promotion and Wellness Theories and Frameworks	3
EXCM 450	Nutrition, Health and Performance	3
EXCM 482	Research Methods and Evidence in Exercise Science	3
EXCM 424	Motor Learning and Performance	3

or EXCM 444 Strength Training and Conditioning

**Total Hours** 54

## Suggested Sequence of Courses

The below sequence of courses is meant to be used as a suggested path for completing coursework. An individual student's completion of requirements depends on course offerings in a given term as well as the start term for a major or graduate study. Students should consult their advisor for assistance with course selection.

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
BIOL 101 & BIOL 111	General Biology I and General Biology I Lab	4
GNUR 155 & 155L	Human Anatomy and Human Anatomy Lab	4
CORE		3
CORE		3
UNIV 101	First Year Seminar	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
UCWR 110	Writing Responsibly	3
BIOL 102 & BIOL 112	General Biology II and General Biology II Lab	4
GNUR 156 & 156L	Human Physiology and Human Physiology Lab	4
CORE		3
CORE		3
<b>Hours</b>		<b>17</b>
<b>Year 2</b>		
<b>Fall</b>		
PSYC 101	General Psychology	3
CHEM 160 & CHEM 161	Chemical Structure and Properties and Chemical Structure and Properties Laboratory	4
EXCM 101	Introduction to Exercise Physiology	3
CORE		3
CORE		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EXCM 201	Physiology of Exercise	4
CHEM 180 & CHEM 181	Chemical Reactivity I and Chemical Reactivity I Lab	4
STAT 103	Fundamentals of Statistics	3
CORE		3
CORE		3
<b>Hours</b>		<b>17</b>
<b>Year 3</b>		
<b>Fall</b>		
PSYC 273	Developmental Psychology	3
PHYS 111 & 111L	College Physics I Lec / Dis and College Physics Laboratory I	4
EXCM 364	Intro to Clinical Exercise Testing and Prescription	3

CORE		3
CORE		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EXCM 375	Special Populations in Exercise Science	2
EXCM 368	Advanced Clinical Testing and Prescriptions	3
CORE		3
EXCM 301	Advanced Physiology of Exercise	3
PHYS 112 & 112L	College Physics II Lec/Disc and College Physics Lab II	4
<b>Hours</b>		<b>15</b>
<b>Year 4</b>		
<b>Fall</b>		
EXCM 210	Program Design in Exercise	2
EXCM 385	Kinesiology and Sports Biomechanics w/ Lab	4
EXCM 345	Therapeutic Exercise and Rehabilitation	3
EXCM 450	Nutrition, Health and Performance	3
EXCM 435	Health Promotion and Wellness Theories and Frameworks	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EXCM 395	Clinical Internship and Patient Management	6
EXCM 387	Movement Anatomy in Exercise	3
EXCM 390	Psychology of Health and Exercise	3
EXCM 482	Research Methods and Evidence in Exercise Science	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>126</b>

## Year 5

Advanced Specialty Coursework/Internship Experience/Culminating Experience

### Fall

- Foundational Course Work
  - Applied Physiology of Exercise (lecture and lab; 3+1, 4 total credits)
  - Nutrition, Health, and Performance (3 credits) (*If not already completed*)
- Concentration Course Work
  - Motor Learning and Performance (3 credits)
  - Strength Training and Conditioning (3 credits)

or

- EKG Interpretation (3 credits)
- Health Promotion and Wellness Theories and Frameworks (3 credits) (*If not already completed*)
- Elective Course Work
- Must complete a minimum of 6 credit hours

### Spring

- Foundational Course Work
  - Exercise Applications for Special Populations (3 credits)
  - Research Methods and Evidence in Exercise Science (3 credits) (*If not already completed*)
- Concentration Course Work
  - Advanced Exercise Assessment and Programming (3 credits)
  - Applied Biomechanics (4 credits)

or

- Cardiac and Pulmonary Disease and Rehabilitation (3 credits)
- Application of Advanced Clinical Testing and Prescription (lecture and lab; 3+1, 4 total credits)
- Elective Course Work
  - Must complete a minimum of 6 credit hours

### Summer

- Advanced Exercise Science Internship (4 credits)

## Guidelines for Accelerated Bachelor's/ Master's Programs

### Terms

- **Accelerated Bachelor's/Master's programs:** In this type of program, students share limited credits between their undergraduate and graduate degrees to facilitate completion of both degrees.
- **Shared credits:** Graduate level credit hours taken during the undergraduate program and then applied towards graduate program requirements will be referred to as Shared credits.

### Admission Requirements

Accelerated Bachelor's/Master's programs are designed to enhance opportunities for advanced training for Loyola's undergraduates. Admission to these programs must be competitive and will depend upon a positive review of credentials by the program's admissions committee. Accordingly, the admission requirements for these programs may be higher than those required if the master's degree were pursued entirely after the receipt of a bachelor's degree. That is, programs may choose to have more stringent admissions requirements in addition to those minimal requirements below.

Requirements:

- Declared appropriate undergraduate major,
- By the time students begin taking graduate courses as an undergraduate, the student has completed approximately 90 credit hours, or the credit hours required in a program that is accredited by a specialty organization,<sup>1</sup>
- A minimum cumulative GPA for coursework at Loyola that is at or above the program-specific requirements, a minimum major GPA that is at or above the program-specific requirements, and/or appropriate designated coursework for evaluation of student readiness in their discipline.<sup>2</sup>

Students not eligible for the Accelerated Bachelor's/Master's program (e.g., students who have not declared the appropriate undergraduate major) may apply to the master's program through the regular admissions process. Students enrolled in an Accelerated Bachelor's/Master's program who choose not to continue to the master's degree program upon completion of the bachelor's degree will face no consequences.<sup>3</sup>

Ideally, a student will apply for admission (or confirm interest in proceeding towards the graduate degree in opt-out programs) as they approach 90 credit hours. Programs are encouraged to begin advising students early in their major so that they are aware of the program and, if interested, can complete their bachelor's degree requirements in a way that facilitates completion of the program. Once admitted as an undergraduate, Program Directors should ensure that students are enrolled using the plan code associated with the Accelerated Bachelor's/Master's program. Using the plan code associated with the Accelerated Bachelor's/Master's program will ensure that students may be easily identified as they move through the program. Students will not officially matriculate into the master's degree program and be labeled as a graduate student by the university, with accompanying changes to tuition and Financial Aid (see below), until the undergraduate degree has been awarded. Once admitted to the graduate program, students must meet the academic standing requirements of their graduate program as they complete the program curriculum.

- <sup>1</sup> Programs that have specialized accreditation will adhere to the admissions criteria provided by, or approved by, their specialized accreditors.
- <sup>2</sup> The program will identify appropriate indicators of student readiness for graduate coursework (e.g., high-level performance in 300 level courses). Recognizing differences between how majors are designed, we do not specify a blanket requirement.
- <sup>3</sup> If students choose not to enroll in the Accelerated Bachelor's/Master's program, they still must complete all of the standard requirements associated with the undergraduate degree (e.g., a capstone).

## Curriculum

*Level and progression of courses.* The Accelerated Bachelor's/Master's programs are designed to be competitive and attractive to our most capable students. Students admitted to Accelerated Bachelor's/Master's programs should be capable of meeting graduate level learning outcomes. Following guidance from the Higher Learning Commission, only courses taken at the 400 level or higher (including 300/400 level courses taken at the 400 level) will count toward the graduate program.<sup>1,2</sup>

Up to 50% of the total graduate level credit hours, required in the graduate program, may come from 300/400 level courses where the student is enrolled in the 400 level of the course. Further, at least 50% of the credit hours for the graduate program must come from courses that are designed for and restricted to graduate students who have been admitted to a graduate program at Loyola (e.g., enrolled in plan code that indicates the Accelerated Bachelor's/Master's program, typically ending with the letter "D").<sup>3</sup>

In general, graduate level coursework should not be taken prior to admission into the Accelerated Bachelor's/Master's program. Exceptions may be granted for professional programs where curriculum for the Accelerated Bachelor's/Master's program is designed to begin earlier. On the recommendation of the program's Graduate Director, students may take one of their graduate level courses before they are admitted to the Accelerated Bachelor's/Master's program if they have advanced abilities in their discipline and course offerings warrant such an exception.<sup>4</sup>

Undergraduate degree requirements outside of the major are in no way impacted by admission to an Accelerated Bachelor's/Master's program.<sup>5</sup>

*Shared credits.* Undergraduate courses (i.e., courses offered at the 300 level or below) cannot be counted as shared credits nor count towards the master's degree. Up to 50% of the total graduate level credit hours, required in the graduate program, may be counted in meeting both the undergraduate and graduate degree requirements. Of those shared

credits, students in an Accelerated Bachelor's/Master's program should begin their graduate program with the standard introductory course(s) for the program whenever possible. So that students may progress through the Accelerated Bachelor's/Master's program in a timely manner, undergraduate programs are encouraged to design their curriculum such that a student can complete some required graduate credit hours while completing the undergraduate degree. For instance, some of the graduate curriculum should also satisfy electives for the undergraduate major.

The program's Graduate Director will designate credit hours to be shared through the advising form and master's degree conferral review process. Shared credit hours will not be marked on the undergraduate record as having a special status in the undergraduate program. They will be included in the student's undergraduate earned hours and GPA. Graduate credit hours taken during the undergraduate program will not be included in the graduate GPA calculation.

- <sup>1</sup> If students wish to transfer credits from another university to Loyola University Chicago, the program's Graduate director will review the relevant syllabus(es) to determine whether it meets the criteria for a 400 level course or higher.
- <sup>2</sup> Programs with specialized accreditation requirements that allow programs to offer graduate curriculum to undergraduate students will conform to those specialized accreditation requirements.
- <sup>3</sup> In rare cases, the Graduate Director may authorize enrollment in a 400-level course for a highly qualified and highly motivated undergraduate, ensuring that the undergraduate's exceptional participation in the graduate class will not diminish in any way the experience of the graduate students regularly enrolled.
- <sup>4</sup> For example, if a particular course is only offered once every 2-3 years, and a student has demonstrated the necessary ability to be successful, the Graduate Director may allow a student to take a graduate level course to be shared prior to the student being formally admitted to the graduate program. See, also, footnote 4.
- <sup>5</sup> Students should not, for example, attempt to negotiate themselves out of a writing intensive requirement on the basis of admission to a graduate program.

## Graduation

Degrees are awarded sequentially. All details of undergraduate commencement are handled in the ordinary way as for all students in the School/College/Institute. Once in the graduate program, students abide by the graduation deadlines set forth by the graduate program. Students in these programs must be continuously enrolled from undergraduate to graduate degree program unless given explicit permission by their program for a gap year or approved leave of absence.