## HEALTH AND MOVEMENT SCIENCES, MASTER OF SCIENCE (M.S.) WITH A CONCENTRATION IN EXERCISE SCIENCE

#### **Program goal**

This program provides advanced course work for students interested in the application of health and movement science principles to exercise science, teaching and sports medicine. Applicants planning to enter the teaching profession should hold a valid teaching endorsement. Students admitted to this program typically have backgrounds in exercise science, life science or related fields. This program does not provide opportunities for initial licensure in health and physical education.

#### **Student learning outcomes**

- Candidate demonstrates an understanding of research design and statistical applications relative to the disciplines comprising the health and movement sciences.
- Candidate demonstrates a comprehensive or advanced knowledge of the field of health and movement science.

## VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs

The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the Graduate School website (http://www.graduate.vcu.edu/) and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the academic regulations section for additional information on academic regulations for graduate students. (https://bulletin.vcu.edu/academic-regs/)

## **Degree candidacy requirements**

A graduate student admitted to a program or concentration requiring a final research project, work of art, thesis or dissertation, must qualify for continuing master's or doctoral status according to the degree candidacy requirements of the student's graduate program. Admission to degree candidacy, if applicable, is a formal statement by the graduate student's faculty regarding the student's academic achievements and the student's readiness to proceed to the final research phase of the degree program.

Graduate students and program directors should refer to the following degree candidacy policy as published in the VCU Graduate Bulletin for complete information and instructions.

Visit the academic regulations section for additional information on degree candidacy requirements. (https://bulletin.vcu.edu/academic-regs/grad/candidacy/)

### **Graduation requirements**

As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to graduate. No degrees will be conferred until the application to graduate has been finalized.

Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

Visit the academic regulations section for additional information on graduation requirements. (https://bulletin.vcu.edu/academic-regs/grad/graduation-info/)

Apply online today. (https://www.vcu.edu/admissions/apply/graduate/)

#### **Admission requirements**

Degree:	Semester(s) of entry:	Deadline dates:	Test requirements:
M.S.	Fall	Mar 15	
	Spring	Nov 1	

In addition to the general admission requirements of the VCU Graduate School (https://bulletin.vcu.edu/graduate/study/admission-graduate-study/admission-requirements/), applicants must have received a bachelor's degree in exercise science or a related field from an accredited university or college.

## **Degree requirements**

In addition to the VCU Graduate School graduation requirements (https://bulletin.vcu.edu/academic-regs/grad/graduation-info/), students are required to complete course work in core and elective courses and to conduct significant research.

- Credit hour requirements: Students in the M.S. in Health and Movement Sciences program are required to earn a minimum of 36 graduate-level credit hours beyond the baccalaureate. At least onehalf of the credit hours presented for graduation must be at the 600 level or higher.
- 2. Master's-level candidacy and requirements: The Master of Science in Health and Movement Sciences program offers a thesis and non-thesis option. After completing at least 12 graduate credit hours and not more than 18 credit hours, with a minimum GPA of 3.0, all students must apply for advancement to candidacy. In the thesis option, students must complete HEMS 798 Thesis for six credit hours and 30 hours of prescribed course work. Students enrolling in this option will not be required to complete a comprehensive examination. In the non-thesis option, students must complete 36 hours of prescribed course work and must pass a comprehensive examination, which is taken after completing 30 hours of course work.

# **Curriculum requirements Thesis option**

Course	Title	Hours
BIOS 543	Graduate Research Methods I	3
or STAT 543	Statistical Methods I	
HEMS 600	Introduction to Research Design in Health and Movement Sciences	3
HEMS 601	Movement Physiology	3
HEMS 604	Nutrition for Health and Physical Activity	3
HEMS 605	Psychology of Physical Activity	3
HEMS 610	Laboratory Techniques in Rehabilitation Science	3
HEMS 675	Clinical Exercise Physiology	3
HEMS 798	Thesis	6
General electives from list below		6
Specified elective from list below		3
Total Hours		36

The minimum number of graduate credit hours required for this degree is 36.

#### Non-thesis option

Course	Title	Hours
BIOS 543	Graduate Research Methods I	3
or STAT 543	Statistical Methods I	
HEMS 600	Introduction to Research Design in Health and Movement Sciences	3
HEMS 601	Movement Physiology	3
HEMS 604	Nutrition for Health and Physical Activity	3
HEMS 605	Psychology of Physical Activity	3
HEMS 610	Laboratory Techniques in Rehabilitation Science	3
HEMS 675	Clinical Exercise Physiology	3
HEMS 692	Independent Study	6
or HEMS 797	Directed Research Study	
or HEMS 695	Externship	
General electives from list below		6
Specified elective from list below		3
Total Hours		36

The minimum number of graduate credit hours required for this degree is 36.

#### Specified electives

Course	Title	Hours
HEMS 550	Exercise, Nutrition and Weight	3
	Management	
REMS 703	Cardiovascular Exercise Physiology	3
REMS 704	Psychobiology of Physical Activity	3
REMS 705	Metabolic Aspects of Physical Activity	3

#### General electives

Title	Hours
Exercise, Nutrition and Weight Management	3
Independent Study	3
Externship	3
Directed Research Study	3
Biomechanics of Human Motion	3
Neuromuscular Performance	3
Research Seminar in Rehabilitation and Movement Science	0.5
Applied Physiology	4
Advanced Exercise Physiology	3
Cardiovascular Exercise Physiology	3
Psychobiology of Physical Activity	3
Metabolic Aspects of Physical Activity	3
	Exercise, Nutrition and Weight Management Independent Study Externship Directed Research Study Biomechanics of Human Motion Neuromuscular Performance Research Seminar in Rehabilitation and Movement Science Applied Physiology Advanced Exercise Physiology Cardiovascular Exercise Physiology Psychobiology of Physical Activity

#### **Accelerated opportunities**

The department offers opportunities for qualified undergraduate students to earn both an undergraduate and graduate degree in a minimum of five years by completing approved graduate courses during the senior year of their undergraduate program. See the individual program pages in the Undergraduate Bulletin for details.

- B.S. in Biology and M.S. in Health and Movement Science with a concentration in exercise science (https://bulletin.vcu.edu/undergraduate/college-humanities-sciences/biology/biology-bs/)
- B.S. in Health, Physical Education and Exercise Science with a concentration in exercise science and M.S. in Health and Movement Science with a concentration in exercise science (https://bulletin.vcu.edu/undergraduate/college-humanities-sciences/kinesiology-health-sciences/health\_physical-education-exercise-science-bs-concentration-exercise-science/)

#### Contact

R. Lee Franco, Ph.D.

Associate professor and graduate program director francorl@vcu.edu (804) 828-1948

Program website: khs.vcu.edu (http://www.khs.vcu.edu)