

Exercise Science with Concentration in Physical Activity and Public Health, MS

The Department of Health Sciences currently offers a Master of Science in Exercise Science with a public health emphasis. The concentration in physical activity and public health recognizes that inactivity is a major public health problem and represents a significant risk factor for many chronic diseases, including heart disease, stroke, hypertension, metabolic syndrome, obesity, type 2 diabetes, and some types of cancer. Moreover, this concentration integrates key competencies for a degree in exercise science recommended by the American College of Sports Medicine (ACSM), including knowledge of exercise physiology and the assessment and development of physical activity and exercise programs for the general and clinical populations. Graduate students seeking this degree are members of the Bouvé College of Health Sciences—a leading national model for education and research in the health, psychosocial, and biomedical sciences, which supports the university's mission of educating students for a life of fulfillment and accomplishment and creating and translating knowledge to meet global and societal needs through interdisciplinary research, urban engagement, experiential learning, and the integration of classroom learning with real-world experience. Faculty in the department are exploring a range of research topics, including acute/chronic effects of exercise, community-based exercise and nutrition interventions, nutrition epidemiology, health disparities, urban public health, and application of technology for measuring and motivating behavior change.

Two unique features of the program are:

- The program offers three pathways of study based on student interests: research, public health, and practice-based pathways. Students take two electives to enhance their knowledge in their selected pathway. These pathways are designed to train students to pursue a terminal degree in exercise science/opportunities in a research setting, federal/private/nonprofit institutions, and clinical setting.
- We offer students internship, practicum, and research opportunities at both on- and off-campus sites. Experiential education is a key component of the program because application of classroom knowledge provides valuable preparation for a career in exercise science.

Please visit Bouvé College Learning Outcomes (<https://nam05.safelinks.protection.outlook.com/?url=https%3A%2F%2Fbouve.northeastern.edu%2Fbchs%2Fabout%2Flearning-outcomes%2F&data=02%7C01%7Ch.daly%40northeastern.edu%7Cb586f58e7f414e5f23bd08d6a8b7ca62%7Ca8eec281aaa34daeac9b9a398b9215e7%7C0%7C0%7C636881904667538704&data=gs%2BKZy1RfV6o4v%2BwkWyE0yuRS0ZLMuATVHx%2BMhuZdQ%3D&reserved=0/>) for the specific student learning outcomes for this program.

Program Requirements

Complete all courses and requirements listed below unless otherwise indicated.

Core Requirements

A grade of B or higher is required in all course work.

Code	Title	Hours
Exercise Science		
EXSC 5200	Cardiopulmonary Physiology	3
EXSC 5210	Physical Activity and Exercise: Prescription, Measurement, and Testing	3
EXSC 5220	Advanced Exercise Physiology	3
EXSC 5230	Physical Activity and Exercise: Effects on Musculoskeletal Health and Disease	3
EXSC 6202	Electrocardiography, Clinical Assessment, and Prescription	3
Public Health		
PHTH 5540	Health Education and Program Planning	3
PHTH 6208	Urban Community Health Assessment	3
Research		
PHTH 5202	Introduction to Epidemiology	3
PHTH 5210	Biostatistics in Public Health	3
EXSC 6400	Applied Research Methods	3

Electives

Code	Title	Hours
Complete 6 semester hours from the following: ¹		
HSCI 5230	Clinical Nutrition Applications in Health and Disease	6
EXSC 5000 to EXSC 6402		
PHTH 5000 to PHTH 6800		

Program Credit/GPA Requirement

36 total semester hours required
Minimum 3.000 GPA required

¹ Students may choose two courses within one of three areas (public health, practice-based, and research-based) to deepen their knowledge and competency within that area.