



Cleveland University

KANSAS CITY

Chiropractic and Health Sciences

Cleveland University-Kansas City

Academic Catalog Addendum

2021-2022



COLLEGE OF HEALTH SCIENCES..... 2
 MASTER OF SCIENCE IN EXERCISE PHYSIOLOGY PROGRAM..... 3
COURSE DESCRIPTIONS..... 6
 COURSE NUMBERING AND CLASSIFICATION SYSTEM..... 6
 COLLEGE OF HEALTH SCIENCES COURSE DESCRIPTIONS..... 7
 MASTER OF SCIENCE IN EXERCISE PHYSIOLOGY COURSE DESCRIPTIONS 7

COLLEGE OF HEALTH SCIENCES

DEGREE PROGRAMS

MASTER OF SCIENCE IN EXERCISE PHYSIOLOGY PROGRAM

MASTER OF SCIENCE IN EXERCISE PHYSIOLOGY PROGRAM

GENERAL PROGRAM INFORMATION

The Master of Science in Exercise Physiology degree is designed for those who possess a background in the discipline, are inquisitive, enthusiastic, and ready to jump in with both feet. By design and focus, this intensive program maintains the expectation that students will spend equal efforts in investigation of the didactic materials and clinical education experiences as we prepare to enter a career. The 36-credit hour program offers both thesis and non-thesis options, with area of emphasis in Performance Enhancement and Injury Prevention, or Exercise is Medicine.

Whether students complete the clinical education experiences here in Overland Park on the CUKC Campus or with a program preceptor, students will spend a great deal of time mastering the skills required to be successful in this allied health care discipline. Just as importantly, the advanced study strategy is well formatted for those wishing to seek employment or further their education.

On a full-time basis, the program is three trimesters in duration and delivered through three integrated components: remote style coursework, on-campus immersions and lab experiences, and clinical experiences. For most students, the program may be completed in two years or less, depending on the path chosen and the number of courses taken in each trimester.

MASTER OF SCIENCE IN EXERCISE PHYSIOLOGY STUDENT LEARNING OUTCOMES

1. The student will be able to predict and interpret the physiological responses to exercise and relate it to lifestyle choices, body composition, nutrition, and physical activity in direct application to physical fitness, overall health, performance, and conditioning.
2. The student will demonstrate the abilities and skills required to assess health status, determine behavioral readiness, and conduct physiological and fitness testing to determine needs for varying populations.
3. The student will appropriately design, modify, and apply the evidence-based principles, recommendations, and design in programming for exercise prescription based upon the needs of persons from diverse populations.
4. The student will be able to compose and articulate competent communication and interpersonal skills required in the instruction and guidance of programs at the level of a practicing professional.
5. The program accepts the charge to prepare competent entry-level Applied Exercise Physiologists in the cognitive (knowledge), psychomotor (skills), and affective (abilities) learning domains.

Master of Science in Exercise Physiology Curriculum:

Required Coursework (36 Credits)

Required Courses (7 Credits)

Research and Evaluation

HEP 502 Research Methods in Health Sciences (3 Credits)

EXP 505 Exercise Psychology, Communication, and Education (2 Credits)

EXP 510 Exercise Testing and Prescription (2 Credits)

Exercise Physiology and Human Motion (12 Credits)

EXP 510 Exercise Nutrition (2 Credits)

EXP 515 Kinesiology and Human Motion (2 Credits)

EXP 520 Physiology of Exercise (2 Credits)

EXP 610 Advanced Exercise Nutrition (2 Credits)

EXP 615 Advanced Kinesiology and Human Motion (2 Credits)

EXP 620 Advanced Physiology of Exercise (2 Credits)

Application and Distinction (5 credits)

Emphasis - Performance Enhancement and Injury Prevention

EXP 530 Corrective Exercise in Prescription and Rehabilitation (2 Credits)

EXP 630 Corrective Exercise and Rehabilitation Program Design (3 Credits)

or

EXP 535 Current Topics in Enhanced Performance (2 Credits)

EXP 635 Performance Enhancement Program Design (3 Credits)

Emphasis – Exercise is Medicine

EXP 540 Exercise is Medicine (2 Credits)

EXP 640 Exercise is Medicine Program Design (3 Credits)

or

HEP 530 Introduction to Epidemiology (3 Credits)

ANA 514 Histology (4 Credits)

Clinical Education and Capstone Courses (12 Credits)

HEP 626 Laboratory and Field Experience (Repeatable 3 Credits)

HEP 628 Laboratory and Field Experience (3 Credits)

and

HEP 636 Independent Study in Health Sciences I (3 Credits)

HEP 638 Independent Study in Health Sciences II (3 Credits)

or

HEP 696 Thesis Research I (3 Credits)

HEP 698 Thesis Research II (3 Credits)

Students admitted to the MS Program will be advised by the Program Director and Graduate Faculty. After admission, matriculation, and enrollment, the MS student experience is organized around coursework, supervised Clinical Education Experiences and proficiency in skills, a required culminating field experience, and the required completion of a nationally recognized certification examination.

ADMISSIONS REQUIREMENTS

www.cleveland.edu/admissions/admission-requirements

COURSE DESCRIPTIONS

COURSE NUMBERING AND CLASSIFICATION SYSTEM

000-099	Preparatory courses (no credit allowed toward requirements for academic degrees)
100-299	Lower division courses (freshman and sophomore level)
300-499	Upper division courses (junior and senior level)
500-599	First graduate or professional year
600-699	Second graduate or professional year
700-799	Third professional year

BIOL	Biology	CLI	Clinic
BUSI	Business	DIM	Diagnostic Imaging
CHEM	Chemistry	GED	General Diagnosis
ECON	Economics	MPH	Microbiology and Public Health
ENGL	English	NMS	Neuromusculoskeletal Diagnosis
EXSC	Exercise Science	PAT	Pathology
GEDU	General Education	PHY	Physiology
GSCI	General Science	PHT	Physiotherapy
HEP	Health Promotion	PRA	Chiropractic Practice
HIST	History	PRI	Principles of Chiropractic
HSCI	Health Science		
MATH	Mathematics		
OTHA	Occupational Therapy Assistant		
PHYS	Physics		
POLS	Political Science		
PSYC	Psychology		
RDTC	Radiologic Technology		
SOCI	Sociology		
SPCH	Speech		
ACS	Associated Clinical Sciences		
ANA	Anatomy		
CHE	Chemistry		

COURSE REQUIREMENTS AND DESCRIPTIONS

The curriculum outlined in the Catalog or other documents represents the academic programs as they were offered at the time the Catalog was issued. These programs are subject to change. Completion of courses, degree programs, or certificate programs does not constitute a guarantee of employment.

Specific questions relating to the curriculum should be directed to a Dean or Director of the degree program. Advance appointments may be required with these individuals.

The University reserves the right to limit the offering of any course based on faculty availability and/or enrollment.

COURSE PREREQUISITES

Students must successfully complete the prerequisites for a course with a minimum grade of "C," prior to taking the associated course. Corequisites are taken prior to, or concurrent with, the corresponding corequisite course. Withdrawal from a corequisite course will result in an administrative withdrawal from the corresponding corequisite course.

COLLEGE OF HEALTH SCIENCES COURSE DESCRIPTIONS

MASTER OF SCIENCE IN EXERCISE PHYSIOLOGY COURSE DESCRIPTIONS

HEP 502 Research Methods in Health Sciences 3 Credits

Introduction to accessing and understanding professional health literature that includes reading and analyzing professional literature and research reporting, terminology, and statistics. Students apply basic research skills to prepare a research paper for publication in a professional journal.

EXP 505 Exercise Psychology, Communication, and Education 2 Credits

Involves in-depth study of theories of behavior change for clinical populations and the need for health education for specified populations. A further aim to develop professional skills in motivational interviewing and physical activity counseling, while preparing students to apply evidence-based intervention strategies.

EXP 510 Exercise Testing and Prescription 2 Credits

Study and application of evidence based safe and effective exercise testing and programming for people who are apparently healthy. Focus placed on the utilization of assessment information to build appropriate programs focused on established physical and behavioral needs. **Prerequisite:** EXP 505

EXP 520 Physiology of Exercise 2 Credits

Acute and chronic physiological adaptations to exercise stress. Topics include metabolic adaptations, skeletal muscle behavior, respiratory and cardiovascular function during exercise, body composition, and environmental factors related to physical activity.

EXP 620 Advanced Physiology of Exercise 2 Credits

Study of the physiological responses to exercise including the effects of advanced exercise training, extreme environments, hydration and fluid balance, cellular adaptations, and other current topics are addressed. Students are expected to have an established working knowledge of basic exercise physiology principles. – **Prerequisite:** *EXP 515*

EXP 510 Exercise Nutrition 2 Credits

Provides an integrated overview of the physiological requirements and functions macronutrients, micronutrients, and water that are determinants of health, performance, and diseases in varying populations.

EXP 610 Advanced Exercise and Sport Nutrition 2 Credits

Focus placed on the investigation, evaluation, and application of the foremost nutritional practices associated with evidence base as it relates to the demands of physical activity at all levels including competitive sports and the differing needs of special populations. Students are expected to have an established working knowledge of basic human nutrition principles. - **Prerequisite:** *EXP 520*

EXP 515 Kinesiology and Human Motion 2 Credits

Study of anatomical and mechanical aspects of human movement. Students analyze movements as a reflection of varying kinesiological principles and develop the skills required to apply these principles based on analysis.

EXP 615 Advanced Kinesiology and Human Motion 2 Credits

An integrated study of the neural, anatomical, physiological, and biomechanical mechanisms that support body motion. Special attention given to investigation of neuroscience emphasizing the control, sensation, and perception related to human motor control and movement, application to the control of balance and locomotion in development, aging, and learning of physical skills. Students are expected to have an established working knowledge of basic kinesiological and motor control principles. - **Prerequisite:** *EXP 525*

EXP 530 Corrective Exercise in Prescription and Rehabilitation 2 Credits

Examines corrective exercise theory related to the management of muscle imbalances and dysfunctions, and mechanical challenges. Students develop the skills necessary to apply techniques associated with the rationale for corrective exercise, further understanding of human movement impairment, movement assessments, and corrective strategies.

EXP 630 Physiology of Exercise 3 Credits

Develop the corrective exercise strategies to appropriately design the overall rehabilitation program model of cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition management. Students develop the skills required for selection, instruction, and implementation of programs using corrective exercise techniques. - **Prerequisite:** *EXP 530*

EXP 535 **Current Topics in Enhanced Performance** **2 Credits**

Students investigate and appraise the multi-faceted methods to contemporary athlete-centered activities using a case assessment approach; and consider varying competitive populations, discussion and analysis used to determine the appropriate programming for performance enhancement.

EXP 635 **Performance Enhancement Program Design** **3 Credits**

Provides students with the appropriate environment to apply advanced principles in performance enhancement strategies to the overall program model of cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition management. - **Prerequisite:** *EXP 535*

EXP 540 **Exercise is Medicine** **2 Credits**

Prepares future practitioners to become frontline and upstream advocates for healthy lifestyle behaviors through the effective application of Lifestyle Medicine principles. Students learn how to effectively use evidence-based Lifestyle Medicine to prevent and treat non-communicable disease such as Parkinson’s disease, obesity, type 2 diabetes, hypertension, Alzheimer’s, and cardiovascular disease. - **Prerequisite:** *EXP 505*

EXP 640 **Exercise is Medicine Program Design** **3 Credits**

Designed for students to develop and hone skills necessary for implementation of the Exercise is Medicine principles to the overall program model of cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition management. - **Prerequisite:** *EXP 540*

HES 626 **Field Experience** **1 Credit – repeated for 3 Credits**

Structured field experience where theory and practice are applied to prepare informed leaders in the field of health science. **Prerequisites:** *Permission of Program Director or Dean of the College of Health Sciences*

HES 628 **Laboratory and Field Experience** **3 Credits**

Structured field experience where theory and practice are applied to prepare informed leaders in the field of health science. - **Prerequisites:** *Permission of Program Director or Dean of the College of Health Sciences*

HES 636 **Independent Study in Health Sciences I** **3 Credits**

Student-initiated opportunity to study and research in a specialized health promotion area of interest.

HES 638 Independent Study in Health Sciences 3 Credits

Student-initiated opportunity to study and research in a specialized health promotion area of interest. **Prerequisite or Corequisite:** *HES 636 Independent Study in Health Science I*

HEP 696 Thesis Research I 3 Credits

Structured field experience where theory and practice are applied to prepare informed leaders in the field of health science. A quantitative research study in an area of health science is conducted, written up, and presented to Health Science students. **Prerequisites:** *Permission of Program Director or Dean of the College of Health Sciences*

HEP 698 Thesis Research II 3 Credits

Structured field experience where theory and practice are applied to prepare informed leaders in the field of health science. A quantitative research study in an area of health science is conducted, written up, and presented to Health Science students. **Prerequisites:** *Permission of Program Director or Dean of the College of Health Sciences, HES 696*