Graduate Studies



# MS: Nutrition and Exercise Science

### Master of Science (MS)

The interaction of diet and exercise to an individual's overall health status has never been as clear as it is at the current time. The two independent fields of study of Nutrition and Exercise Science are linked together in clinical settings and in non-clinical settings, such as in training for competitive or recreational athletes. The Nutrition and Exercise Science program prepares students to provide services in nutrition and exercise interventions for the promotion of lifestyle change or performance improvement. The program is designed for students with a degree in an allied health field. Coursework emphasizes prevention of lifestyle diseases, exercise physiology, metabolism and research methods. Graduates can look forward to career opportunities in cardiopulmonary rehabilitation, wellness programs and sports nutrition. This program is an interdisciplinary offering of the Departments of Health, Human Performance and Recreation and Human Environmental Studies. Faculty teaching in the Program has expertise in all areas of nutrition science, health education/promotion and exercise physiology. The course offerings are synergistic and provide the student with the view from the discipline of nutrition as well as the view of the exercise physiologist. The courses in exercise physiology and metabolism are offered in the same semester; similarly the courses in clinical exercise physiology and pathophysiology are offered in the same term. This curricular design provides students with a view of the same issues from each of the disciplines during the same term.

## Nutrition and Exercise students will...

- Understand the common issues related to the fields of nutrition and exercise science.
- Conduct research in the fields of nutrition and exercise science.
- Have the opportunities to work with professors who have a thorough knowledge of their fields and who are productive scholars.
- Have the opportunity to work with caring professors interested in their student's professional development.
- Be prepared to work in a wide variety of settings in various capacities within the nutrition, health, and/or fitness disciplines as licensure permits.

### **Career Planning**

Students can focus their studies toward their particular career goal. Faculty advisors meet one-on- one with students to assist with this process. In addition, the University has a Career Services Office on campus which also assists students with career development.

## Internship and Employment Opportunities of Recent Graduates/ Graduate Schools and Programs of Recent Graduates

Recent graduates have been accepted into and completed Ph.D. programs in exercise physiology or nutrition at various universities. Some of these graduates are now:

- Professors or in post-doctoral programs.
- Several have completed the coursework and dietetic internship required to be eligible for the national board exam and have successfully passed this exam to allow them to work as Registered Dietitians.
- Others are working in various capacities in hospital settings e.g. cardiac rehabilitation.
- Many are employed in the fitness industry as fitness directors, personal trainers, and performance enhancement specialists.
- Several work in professional, collegiate and high school athletics as strength and conditioning coaches, athletic trainers, and registered dietitians.
- Some work in corporate health promotion programs as corporate health promotion mangers.
- Finally some are employed in community or public health promotion programs.

Students have completed internships in a wide variety of positions to include:

- Fitness
- Outpatient rehabilitation
- Nutrition
- Dietetics
- Performance enhancement
- Strength and conditioning
- Health promotion
- Weight loss programs

### **Admission Requirements**

Admission to the MS in Nutrition and Exercise Science is a two-step process. Students must first be accepted into the Graduate School before being accepted into the MS in Nutrition and Exercise Science program. The number of slots available in a class is limited each year, so it is possible that students who have met all prerequisites will not gain admittance.

- 1. An undergraduate GPA of 3.0 on a 4 point scale
- A 3.0 average in the following coursework: nutrition science, exercise physiology, anatomy and physiology, and organic and/or biochemistry

A combined score of 950 on the verbal and quantitative sections of the "old" Graduate Record Examination (GRE). Scores from the GRE "revised" General Test will be considered on an individual basis.

Conditional admission will be considered if:

- Prerequisites are partially filled and GPA and GRE criteria are met
  - Undergraduate GPA is a 2.75 or higher and product of undergraduate GPA and sum of GRE scores (verbal and quantitative) exceeds 2499.

To learn more Office of Admissions (573) 651-2590 admissions@semo.edu www.semo.edu To explore the College of Health and Human Services online, visit http://www.semo.edu/health/index.html

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# Graduate Studies

# COLLEGE OF HEALTH AND HUMAN SERVICES MS: Nutrition and Exercise Science

# Master of Science (MS)

This is a guide based on the 2016-2017 Graduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on factors such as dual enrollment, remediation, and summer enrollment. Students meet with an academic advisor each semester and use DegreeWorks to monitor their progress.

# **CURRICULUM CHECKLIST**

#### Nutrition & Exercise Science - 39 hours required

### Core Requirements:

\_\_\_FN530 Pathophysiology: Implications for Nutrition & Exercise Science (3) (Fall only Odd Years)

- \_\_FN550 Vitamin Metabolism (3) (Fall only Even Years)
- \_\_\_HE637 Research Design in HES (Spring only Every Year) (3)
- \_\_\_\_HL601Physiology of Exercise (3) (Fall only Even Years)
- \_\_\_HL603 Cardiovascular Exercise Physiology (3) (Spring only even Years)
- HL621 Exercise in Health and Disease (3) (Fall only Odd Years) HL/FN 690 Seminar in Nutrition and Exercise Science (3) (Spring only Odd Years)
- \_\_\_\_PY571 Introductory Behavioral Statistics (3) (every semester)
- Electives\*:
- \_\_\_\_HLxxx or FNxxx (3)
- XXxxx Electives from other areas (6) Choose one:

# Non-Thesis Option:

- \_\_\_\_ HL691 Applied Research (3)
- \_\_\_\_HL/FN699 Internship (3)
- \_\_\_\_\_GR6XX Comprehensive/Oral Exam (0)

### Thesis Option:

- HE694 Thesis (3)
- \_\_\_\_HE695 Thesis (3)
- GR6XX Comprehensive/Oral Exam (0)

### Suggested Electives:\*

- \_\_\_CF518Gerontology Practicum (3)
- CH531 Biochemistry I (3)
- \_\_\_\_FN502 Nutrition II (3)
- FN520 Nutrition and Aging (3)
- \_\_\_FN525 Nutrition Counseling (3)
- \_\_\_\_FN540 Community Nutrition (3)
- \_\_\_\_FN601 Sport Nutrition (3)
- \_\_\_FN605 Nutrition in the Life Cycle (3)
- \_\_\_HL510 Health Concerns of Aging (3)
- HL511 Applied Anatomy (3)
- \_\_\_\_HL531 Advanced Exercise Testing (3)
- \_\_\_\_HL671 Implementation & Organization of Fitness Programs (3)
- \_\_\_\_HL672 Health Promotion Programs (3)
- \_\_\_\_SM540Legal Aspects of Sport and Physical Activity (3)

### Recommended sequence of required coursework

An example of a typical sequence of classes for a full-time graduate student who has chosen the Applied Research HL 691 (3) and Internship (3) HL/FN699 (3) and Comprehensive Exams (GR 698) option is shown below.

Fall 2016	Spring 2017	Sum 2017	Fall 2017	Spring 2018
HL601	Elective	HL699	HL 621	HL603
PY571	HE 637		FN 530	HL 691
FN 550	HL 690		Elective	Elective GR 698

#### **Degree Requirements**

If a student completes a thesis HE694 (3) and HE695 (3) then no internship is required. If a student selects to complete Applied Research HL691 Applied Research (3), then an internship HL/FN699 (3) and comprehensive exam GR 698 is required.

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# Why should I study Nutrition and Exercise Science at Southeast?

Southeast offers a unique program in that in focuses on both nutrition and exercise science. The Program stands apart from other programs in that it is truly an interdisciplinary curriculum that uses the expertise of faculty from both disciplines. The course offerings are synergistic and provide the student with the view from the discipline of nutrition the as well as the view of the exercise physiologist. The courses in exercise physiology and metabolism are offered in the same semester; similarly the courses in clinical exercise physiology and pathophysiology are offered in the same term. This curricular design provides students with a view of the same issues from each of the disciplines during the same term. The curriculum distribution between the fields of nutrition and exercise science and the synergy of the curriculum make this program unique.

Class sizes are small and faculty utilize experiential learning as a cornerstone of their instructional philosophy. Students have access to modern equipment in the human performance and body composition laboratories. All students are required to complete a research project. Most students end up presenting their research at some type of conference e.g. The American College of Sports Medicine, The Academy for Nutrition and Dietetics and The National Strength and Conditioning Association.

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