



# The M.S. Degree in Nutritional Sciences



The Master's of Science Program in Nutritional Sciences provides students with multidisciplinary training while enabling them to focus on areas in which they are particularly interested. The M.S. program prepares students for a number of careers in health care, academia, education, wellness and other nutrition-related fields.

## 1. Clinical Emphasis



[Untitled illustration]. Retrieved March 29, 2014 from <http://www.freshandnaturalfoods.com/home-page-slider/calling-practitioner/>

Courses in this area focus on nutrition support, pediatric nutrition, diabetes, renal disease and cardiovascular disease, as well as drug-nutrient interactions. This emphasis area is designed for students with a Bachelor's degree in dietetics or nutrition. Prerequisite- B.S. in Dietetics and/or meeting ADA in Dietetics requirements for internship.

**Total required credits to complete this emphasis area = 7-9 credits**

- CNU 501 Nutraceuticals and Functional Foods (2 credits) - OR - CNU 502 Obesity Cell to Community (2 credits)
- NS/CNU 702 Clinical Nutrition Problem Based Case Studies (1-3 credits)
- CNU 611 Advanced Medical Nutrition Therapy (2 credits)
- CNU 612 Examination Skills for the Clinical Nutritionist (2 credits)

## 3. Sports & Wellness Emphasis



[Untitled image]. Retrieved March 29, 2014 from <http://thisisbabe.com/events/daho-health-beauty-fitness-fair/attachment/health-and-fitness-expo-apple-jump-rope-healthy-measuring-tape/>

Courses in this area focus on disease prevention, nutrient utilization, exercise, and behavior intervention strategies for lifestyle management. This emphasis area is designed for students with a baccalaureate degree in an allied health field.

**Total required credits to complete this emphasis area = 11**

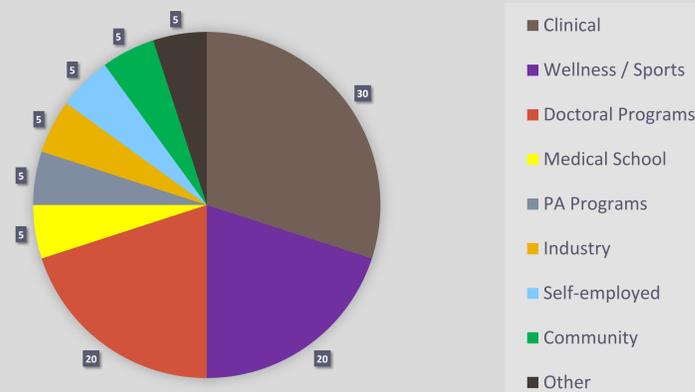
- NS/CNU 605 Wellness and Sports Nutrition (3 credits)
- KHP 600 Exercise Stress Testing and Prescription (3 credits)
- KHP 620 Advanced Exercise Physiology (3 credits)
- CNU 501 Nutraceuticals and Functional Foods (2 credits)

## PROGRAM OVERVIEW

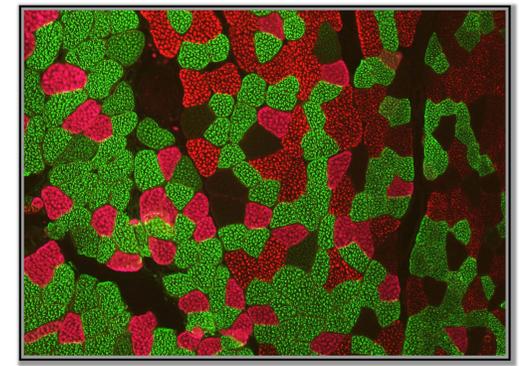
Students in the Nutritional Sciences M.S. program take a set of core courses (see "Core Classes" below), while also choosing a specialty area with either the 1) Clinical Emphasis, 2) Molecular & Biochemical Emphasis, 3) Sports & Wellness Emphasis, or 4) Community Emphasis. Fifteen of the required 30 credit hours come from the core classes, with the remainder coming from the emphasis area and electives. The program usually takes 2 years to complete, and the degree is earned after passing an oral exam. Applicants who have been accepted into the M.S. program can also apply for a Research Assistantship with individual faculty. Students often go on to pursue a Ph.D. or to pursue jobs in hospital clinical services (e.g. pediatrics, nutrition support teams), or in Wellness/Sports team services (usually in academic settings).

## CAREER PATHS

Our Graduates' Career Paths



## 2. Molecular & Biochemical Emphasis



Fiber typing image from mouse muscle tissue was provided courtesy of the Peterson Lab, College of Health Sciences, University of Kentucky.

Courses focus on molecular and biochemical approaches to nutrition in areas such as receptor and gene regulation and the alteration of regulatory biochemical pathways.

**Total required credits to complete this emphasis area = 8 credits**

- BCH 607 (IBS 601) Biochemistry or CHE 550 (3 credits)
- BCH 608 (IBS 602) Biochemistry or CHE 552 (3 credits)
- NS/CNU 606 Molecular Biology Applications in Nutrition (2 credits)

## 4. Community Emphasis



[Untitled illustration]. Retrieved March 29, 2014 from <http://www.kyag.com/Kentucky-Agrees/2012/Levittown-Farmers-Market-voted-eighth-in-nation-first-in-state.html>

For this emphasis, courses focus on economic, geographic, social and educational nutrition intervention, e.g. how to effectively assess specific populations and differences between clinical and community approaches to health.

**Total required credits to complete this emphasis area = 6 credits**

- *This is an individualized curriculum.*

## CORE CLASSES

Core Courses for a M.S. in Nutritional Sciences

**Total Required Core Credits = 15**

- Prerequisites: 200 level or equivalent physiology course
- Recommended but not required: 400 level biochemistry course
- NS/CNU 601 Integrated Nutritional Sciences Part I (3 credits)
- NS/ASC/CNU 602 Integrated Nutritional Sciences Part II (3 credits)
- NS/CNU/FCS 603 Integrated Nutritional Sciences Part III (2 credits)
- NS/CNU/NFS704 Current Topics (1 credit)
- STA 570 Basic Statistical Analysis (4 credits) - OR - IBS 611 Practical Statistics (1 credit)
- NS/CNU 609 Ethics (1 credit)
- NS 771 Seminar in Nutritional Sciences – must be taken twice (0 credits for Plan B students, 1 credit for Plan A\* students)
- NS/CNU/NFS 782 Special Problems (1-6 credits: for Plan B\*\* students)

\*Plan A = MS with a Thesis  
\*\*Plan B = MS without a Thesis