

Listed below are the prerequisite requirements for application to the MS in Nutrition Sciences- DEP track. Please note that these courses are UAB's equivalent to prerequisite requirements and that courses from other colleges/universities may have different course names or numbers. Underlined is the prerequisite topic area required of all applicants.

1) **Introductory Biology. 3 credit hours (minimum).**

1. **UAB Offers - Biology BY 101. Topics in Contemporary Biology. 3 Hours.**

Description: Selected topics in the current understanding of biological systems, ranging from humans to ecosystems. Particular focus on scientific issues such as human diseases, genetic engineering, emerging infectious diseases, environmental causes of disease, and climate change, as well as analysis of these issues as presented in print and electronic media.

2) **Physiology. 3 credit hours (minimum).**

1. **UAB Offers - Physiology BY 116. Introductory Human Physiology. 4 Hours.**

Description: Integrated functions of human cells, tissues, and organ systems.

**Prerequisite= BY 115. Human Anatomy. 4 Hours.**

Description: Principles of vertebrate structure with emphasis on gross and microscopic human anatomy. Survey of human embryology and evolution. Lecture and laboratory.

*Note: For universities in which Anatomy/Physiology I and II are offered, only Anatomy/Physiology I is required as a prerequisite for admissions.*

3) **Organic Chemistry. 3 credit hours (minimum).**

1. **UAB Offers - Organic Chemistry CH 107. Introductory Chemistry II. 3 Hours.**

Description: Fundamental organic and biochemistry. The second part of the chemistry sequence for non-science majors and nursing students. Covers concepts of organic chemistry and biochemistry. Emphasis on molecules involved in life processes. Writing assignments structured to build on scientific reasoning. Not applicable to a major or minor in chemistry. Quantitative Literacy is a significant component of this course.

**Prerequisites:** CH 105 or CH 115

2. **UAB Also Offers – Organic Chemistry CH 235. Organic Chemistry I. 3 Hours.**

Description: Structure, nomenclature, properties, and reactivity of compounds with various organic functional groups: alkanes, alkenes, alkynes, alkyl halides and alcohols. Emphasis on the mechanisms of organic reactions and problem solving. Concurrent enrollment in CH 235R Organic I Recitation required.

**Prerequisite:** CH 117

4) **Microbiology. 3 credit hours (minimum).**

1. **UAB Offers - Microbiology BY 261. Introduction to Microbiology. 4 Hours.**

Description: Cell structure and function, microbial genetics, viruses, and epidemiology and infectious disease. NOTE: Cannot be applied toward requirements for a biology major. Lecture and laboratory.

**Prerequisites:** BY 116 and CH 107 (see #2 and #3 above)

5) **Minor in Nutrition Sciences. 18 credit hours (minimum).**

The Minor in Nutrition Sciences requirement includes very specific topic areas. Please review UAB's Minor in Nutrition Sciences for the topic areas required, and note that UAB's Minor is entirely online if you need to complete any of these courses.

1. **NTR 222. Nutrition and Health.**

Description: Introduction to principles of nutrition; essential nutrients and their relation to growth, maintenance, and optimal functioning of the body; dietary recommendations to promote wellness and prevent chronic disease. **Offered Fall, Spring, Summer.**

**Please Note** that NTR 222 is the required prerequisite for all other courses.

**2. NTR 232. Lifecycle Nutrition. 3 Hours.**

Role of nutrition and dietary factors on the growth, development, and maintenance of health throughout the human life cycle. Nutritional guidelines/recommendations, special nutritional needs, physiology, and nutritional health concerns for each stage of the human lifecycle, from preconception through adulthood and aging. **Offered Fall.**

**3. NTR 320. Nutrition and the Consumer. 3 Hours.**

Description: Contemporary nutrition topics that affect consumers, such as dietary supplements, food additives, food safety, food, genetically modified organisms in foods & integrative medicine. Techniques to communicate nutrition information to consumers. **Offered Spring.**

**4. NTR 330. Nutrition and Metabolism. 3 Hours.**

Description: Metabolism and functions of nutrients after mixed meal intakes, including USDA MyPlate, low-carbohydrate or low-fat diets; biosynthesis of vitamins and co-factors and whole food sources; human requirements for energy, amino acids, minerals, and vitamins; food fortification; current human nutritional challenges and diseases. **Offered Spring.**

**5. NTR 420. Nutritional Genetics. 3 Hours.**

Description: How behavioral practices, environmental influences, and genetic makeup interact to influence individual preferences and responses to foods. Models to incorporate the interaction of these factors in developing potential strategies to prevent disease and achieve better nutritional health. **Offered Fall.**

**6. NTR 421. Nutrition Assessment and the Nutrition Care Process. 3 Hours.**

Description: Introduction to the Nutrition Care Process (NCP), a systematic approach to providing high-quality nutrition care. The NCP provides a framework for critical thinking and decision making. Gain factual knowledge, learn to apply course material through case study application, and explore fundamental principles in medical nutrition related content areas. **Offered Spring.**

Additional information related to courses may be found via these UAB undergraduate course catalogs:

Biology- <http://catalog.uab.edu/coursedescriptions/by/>

Chemistry- <http://catalog.uab.edu/coursedescriptions/ch/>

Nutrition- <http://catalog.uab.edu/coursedescriptions/ntr/>

To enroll in undergraduate courses at UAB for prerequisite purposes, prospective students must first [APPLY](#) for admissions through the Undergraduate Admissions office. Please consult with [their offices](#) for more information about this process.

*Please note that taking these pre-requisite courses does not guarantee admission to the program, applicants must still go through the [Graduate School Application Process](#). Further, these courses do not count towards graduate credit for students enrolled in the MS in Nutrition Sciences programs. While the Nutrition Minor is offered online, the sciences courses listed are not available online.*