Prerequisite Coursework

For Admission to the Specialization *Professional Studies in Dietetics* | University of Nebraska-Lincoln

Applicant Full Name	*Applicant Email Address*	*Date*

Requirement (and Recommended Course at UNL)	**Equivalent Course You Have Completed or Will Complete** *Grade column: If not yet completed/graded, enter expected completion date instead.*			
	Institution	**Course Title**	**Credit Hours**	**Grade**
General Chemistry with Lab (CHEM 109)				
Organic Chemistry with Lab (CHEM 251/253 or CHEM 261/263)				
General Biology with Lab (BIOS 101/101L or LIFE 120/120L)				
Microbiology (BIOS 111 or BIOS 312) or Food Safety and Sanitation (NUTR 372)				
Human Physiology or 2 semesters of combined Anatomy-Physiology (BIOS 213/213L)				
Biochemistry (BIOC 401 or BIOC 431)				
General or Introduction to Psychology (PSYC 181)				
Introduction to Nutrition (NUTR 250)				
Food Science with Lab or Food Preparation with Lab (NUTR 244*/245* or NUTR 344)				
Advanced Nutrition or Nutrient Metabolism at 300-400 level (NUTR 455)				
Medical Nutrition Therapy I (NUTR 450)				
Medical Nutrition Therapy II (NUTR 452)				

** Not currently offered.*

See next page for descriptions of recommended courses.

Prerequisite Coursework

For Admission to the Specialization *Professional Studies in Dietetics* | University of Nebraska-Lincoln

Course Descriptions (for reference)

An asterisk (*) indicates a course not currently offered.

BIOC 401: Elements of Biochemistry
Structure and function of proteins, carbohydrates, lipids and nucleic acids; enzymes; principal metabolic pathways; and biochemical expression of genetic information.

BIOC 431: Biochemistry I: Structure and Metabolism
Structure and function of proteins, nucleic acids, carbohydrates and lipids; nature of enzymes; major metabolic pathways of catabolism; and biochemical energy production.

BIOS 101: General Biology
Analysis of the structure, functions, and interactions of organisms from the molecular to the ecosystem levels.

BIOS 101L: General Biology Lab
Laboratory exercises and experiments that complement material covered in BIOS 101.

BIOS 111: Introduction to Microbiology and Human Health
Comparative study of microorganisms important for human health and disease (bacteria, fungi, viruses, prions), principles and applications of microbiology.

BIOS 213: Human Physiology
Elementary survey of the basic functional systems of the human body: the muscular, nervous, receptor, circulatory, respiratory, digestive, excretory, endocrine, and reproductive systems.

BIOS 312: Microbiology
Microbial cell structure, genetics, metabolic and biosynthetic activity, diversity, ecology and evolution including host-microbe interactions.

CHEM 109: General Chemistry I
Lecture and laboratory serving as an introduction to chemical reactions, the mole concept, properties of the states of matter, atomic structure, periodic properties, chemical bonding, and molecular structure.

CHEM 251: Organic Chemistry I
Chemistry of carbon compounds. Applications to the biological sciences, agriculture and pre-professional programs including premedical and pre-dental. Emphasizes basic principles.

CHEM 253: Organic Chemistry I Laboratory
Basic techniques of organic chemistry. Structure, identification, physical properties of compounds, molecular modeling, and introduction to the spectroscopic characteristics of organic compounds.

CHEM 261: Organic Chemistry
CHEM 261 and 262, together with lab courses 263 and 264, form a continuous basic course covering the important compounds of carbon.

CHEM 263: Organic Chemistry Laboratory
Students following the professional curriculum in chemistry should elect this course.

LIFE 120: Fundamentals of Biology I
First in a series of life sciences courses. A systems approach to the study of life at the cellular level, investigating cellular structures, chemical processes, cell metabolism, cell division, gene expression and introducing patterns of inheritance.

LIFE 120L: Fundamentals of Biology I Lab
This laboratory will use a systems-based approach to explore the study of life at the cellular level, investigating cellular structures, chemical processes, cell metabolism, cell division, gene expression and introducing patterns of inheritance. Parallel registration in LIFE 120 is required.

***NUTR 244: Scientific Principles of Food Preparation**
Chemical, physical, sensory, and nutritional principles of food preparation.

***NUTR 245: Scientific Principles of Food Preparation Laboratory**
Application of chemical, physical, sensory, and nutritional principles of food preparation.

NUTR 250 Human Nutrition and Metabolism
Introduction to nutrient function in the body, nutrient chemistry and energy metabolism. Role of nutrients in health and disease.

NUTR 344 Nutrition and Food for Optimal Health
Integration of current dietary guidelines, nutrient assessment methodologies, scientific principles of food preparation, financial accountability, concepts of healthy menu planning, and preparation techniques in promotion of healthy living.

NUTR 372: Food Safety and Sanitation
Various factors that result in food illness: food allergy, natural toxins, parasites, microbial and viral food borne infections and food borne intoxications. Students will assess hazards, identify critical control points and establish monitoring and system verification.

NUTR 450: Medical Nutrition Therapy I
Nutrition assessment, nutrition support, documentation of nutrition services and medical terminology.

NUTR 452: Medical Nutrition Therapy II
Nutrition in the disease state. Physiological and biochemical basis of medical nutrition therapy.

NUTR 455: Advanced Nutrition
Biochemical and physiological aspects of human nutrition. Nutrient transport, storage and utilization under various metabolic states and relationships to the development of chronic diseases.

PSYC 181: Introduction to Psychology
Introduction to concepts and research in the areas of biological, cognitive, developmental, social, and health-related bases of behavior, with emphases on critical thinking, research methods, and integration across areas of psychology.