Nutrition and Dietetics (N&D)

B.S. in Dietetics (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/nutritionanddietetics/nutr-bs-diet/)

B.S. in Human Nutrition (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/nutritionanddietetics/nutr-bs-cn/)

Minor in Nutrition (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/nutritionanddietetics/nutr-minor/)

Four Year Plan - B.S. in Dietetics

Freshman Year		
Fall		**Credits**
N&D 240	Fundamentals of Nutrition	3
N&D 240L	Fundamentals of Nutrition Laboratory	1
ENGL 110	College Composition I	3
MATH 103	College Algebra	3
CHEM 115 or CHEM 121	Introductory Chemistry or General Chemistry I	3
CHEM 115L or CHEM 121L	Introductory Chemistry Laboratory or General Chemistry I Laboratory	1
*Options CHEM 115/L + 116/L OR CHEM 121/L + 122/L, + 340/L. The latter course sequence in chemistry may be most appropriate for those students seeking graduate school admission in health-related fields. The master's program at UND in nutrition and dietetics accepts either chemistry course sequence.		
	Credits	**14**
Spring		
N&D 100	Introduction to Nutrition and Dietetics	1
N&D 220	Foodservice Safety and Sanitation	1
PSYC 111	Introduction to Psychology	3
ENGL 130	Composition II: Writing for Public Audiences	3
CHEM 116 or CHEM 122	Introduction to Organic and Biochemistry or General Chemistry II	3
CHEM 116L or CHEM 122L	Introduction to Organic and Biochemistry Laboratory or General Chemistry II Laboratory	1
Essential Studies		5
*Options CHEM 115/L + 116/L OR CHEM 121/L + 122/L, + 340/L. The latter course sequence in chemistry may be most appropriate for those students seeking graduate school admission in health-related fields. The master's program at UND in nutrition and dietetics accepts either chemistry course sequence.		
	Credits	**17**
Sophomore Year		
Fall		
N&D 250	Current Trends in Nutrition	3
N&D 335	World Food Patterns	3
BIMD 220	Human Anatomy Physiology I	3
BIMD 220L	Human Anatomy Physiology I Lab	1
COMM 110	Fundamentals of Public Speaking	3
Essential Studies		3
	Credits	**16**
Spring		
N&D 260	Principles of Foods and Food Science	3
BIMD 221	Human Anatomy Physiology II	3
BIMD 221L	Human Anatomy Physiology II Lab	1
MGMT 300	Principles of Management	3
SOC 326 or PSYC 241	Sociological Statistics or Introduction to Statistics	3-4
Essential Studies		3
Application in February for fall semester admission to professional component		
*If taken CHEM 121/L + 122/L, take CHEM 340/L: Survey of Organic Chemistry. This course sequence in chemistry may be most appropriate for those students seeking graduate school admission in health-related fields. The master's program at UND in nutrition and dietetics accepts either chemistry course sequence.		
	Credits	**16-17**
Junior Year		
Fall		
N&D 310	Nutrition Assessment	3
N&D 325	Nutrition Through the Life Cycle	3
N&D 344	Nutrition Education and Counseling	3
N&D 494	Research in Nutrition and Dietetics	1
PPT 315	Human Pharmacology	3
N&D 498	Supervised Practice in Dietetics Counseling (45 clock hours)	1
	Credits	**14**
Spring		
N&D 345	Community Nutrition	3
N&D 380	Food Service Production and Management	3
N&D 441	Nutritional Biochemistry	4
N&D 498	Supervised Practice in Dietetics Community Nutrition (45 clock hours)	1
N&D 498	Supervised Practice in Dietetics Food Production & Management (180 clock hours)	4
MED 205	Medical Terminology	1
	Credits	**16**
Senior Year		
Fall		
N&D 350	Medical Nutrition Therapy I	3
N&D 450	Medical Nutrition Therapy II	3
N&D 480	Interprofessional Health Care	1
N&D 498	Supervised Practice in Dietetics Medical Nutrition Therapy (270 clock hours)	6
	Credits	**13**
Spring		
N&D 348	Sports Nutrition	3
N&D 488	Foundations of Dietetic Practice	3
N&D 498	Supervised Practice in Dietetics Practicum (360 clock hours)	8
	Credits	**14**
	Total Credits	**120-121**

Every student must fulfill all University, Departmental, and Essential Studies requirements. (https://und.edu/academics/essential-studies/)

Four Year Plan - B.S. in Human Nutrition-Health Promotion

Freshman Year		
Fall		**Credits**
N&D 240	Fundamentals of Nutrition	3
N&D 240L	Fundamentals of Nutrition Laboratory	1
MATH 103	College Algebra	3
ENGL 110	College Composition I	3

CHEM 121 or CHEM 115	General Chemistry I * or Introductory Chemistry	3
CHEM 121L or CHEM 115L	General Chemistry I Laboratory * or Introductory Chemistry Laboratory	1
	Credits	**14**
Spring		
N&D 100	Introduction to Nutrition and Dietetics	1
N&D 220	Foodservice Safety and Sanitation	1
PSYC 111	Introduction to Psychology	3
CHEM 122 or CHEM 116	General Chemistry II * or Introduction to Organic and Biochemistry	3
CHEM 122L or CHEM 116L	General Chemistry II Laboratory * or Introduction to Organic and Biochemistry Laboratory	1
ENGL 130	Composition II: Writing for Public Audiences	3
Elective, Essential Studies (FA/Hum), or Option A Course		3
	Credits	**15**
Sophomore Year		
Fall		
N&D 250	Current Trends in Nutrition	3
N&D 325	Nutrition Through the Life Cycle	3
BIMD 220	Human Anatomy Physiology I	3
BIMD 220L	Human Anatomy Physiology I Lab	1
Elective, Essential Studies (FA/Hum), or Option A Course		6
	Credits	**16**
Spring		
COMM 110	Fundamentals of Public Speaking	3
BIMD 221	Human Anatomy Physiology II	3
BIMD 221L	Human Anatomy Physiology II Lab	1
CHEM 340	Survey of Organic Chemistry *If CHEM 115 and CHEM 116 was taken instead then do not have to take CHEM 340	4
CHEM 340L	Survey of Organic Chemistry Laboratory *If CHEM 115L and CHEM 116L was taken instead then do not have to take CHEM 340L	1
Elective, Essential Studies (FA/Hum), or Option A Course		3
	Credits	**15**
Junior Year		
Fall		
N&D 335	World Food Patterns	3
N&D 344	Nutrition Education and Counseling	3
Elective, Essential Studies (FA/Hum), or Option A Course		9
	Credits	**15**
Spring		
N&D 345	Community Nutrition	3
N&D 348	Sports Nutrition	3
SOC 326 or PSYC 241	Sociological Statistics or Introduction to Statistics	3-4
Elective, Essential Studies (FA/Hum), or Option A Course		6
	Credits	**15-16**
Senior Year		
Fall		
N&D 310	Nutrition Assessment	3
N&D 494	Research in Nutrition and Dietetics	1
Elective, Essential Studies (FA/Hum), or Option A Course		11
	Credits	**15**
Spring		
N&D 441	Nutritional Biochemistry	4
N&D 497	Supervised Practice in Human Nutrition 180 clock hours	4
Must have a 2.2 GPA, satisfactory completion of service learning requirements, and prior or concurrent completion of N&D 344 and N&D 345. Must have a C or better in your nutrition, foods, and science courses. Application by October 20 for spring supervised practice or by March 20 for summer and fall supervised practice.		
Elective, Essential Studies (FA/Hum), or Option A Course		7
	Credits	**15**
	Total Credits	**120-121**

Option A Courses (choose 4 courses from the list)

N&D 260 Principles of Foods & Food Science

N&D 380 Food Service Production & Management

KIN 240 Introduction to Wellness

MGMT 300 Principles of Management

PHE 301 Principles & Foundation of Health Education

PHE 307 Methods & Materials of Health Education

T&L 252 Child Development

PSYC 250 Developmental Psychology

PSYC 355 Adulthood & Aging

SOC 352 Aging & Society

*Students may take CHEM 115/L and CHEM 116/L OR CHEM 121/L, CHEM 122/L, and CHEM 340/L (or higher organic chemistry).

N&D 497 Supervised Practice in Human Nutrition: Students must have a 2.2 GPA, satisfactory completion of service learning requirements, and prior or concurrent completion of N&D 344 and N&D 345. Application by October 20th for spring supervised practice or by March 20 for summer and fall supervised practice.

Every student must fulfill all University, Departmental, and Essential Studies requirements. (https://und.edu/academics/essential-studies/) Students must complete enough electives to bring total credit hours up to the 120.

Four Year Plan - B.S. in Human Nutrition-Sciences

Freshman Year		
Fall		**Credits**
N&D 240	Fundamentals of Nutrition	3
N&D 240L	Fundamentals of Nutrition Laboratory	1
MATH 103	College Algebra	3
ENGL 110	College Composition I	3
CHEM 121 or CHEM 115	General Chemistry I or Introductory Chemistry	3
CHEM 121L or CHEM 115L	General Chemistry I Laboratory or Introductory Chemistry Laboratory	1
	Credits	**14**
Spring		
N&D 100	Introduction to Nutrition and Dietetics	1
N&D 220	Foodservice Safety and Sanitation	1
PSYC 111	Introduction to Psychology	3
CHEM 122 or CHEM 116	General Chemistry II or Introduction to Organic and Biochemistry	3
CHEM 122L or CHEM 116L	General Chemistry II Laboratory or Introduction to Organic and Biochemistry Laboratory	1
ENGL 130	Composition II: Writing for Public Audiences	3

Elective, Essential Studies (FA/HUM), or Option B		3
	Credits	**15**
Sophomore Year		
Fall		
N&D 250	Current Trends in Nutrition	3
N&D 325	Nutrition Through the Life Cycle	3
BIMD 220	Human Anatomy Physiology I	3
BIMD 220L	Human Anatomy Physiology I Lab	1
Elective, Essential Studies (FA/HUM), or Option B		6
	Credits	**16**
Spring		
COMM 110	Fundamentals of Public Speaking	3
BIMD 221	Human Anatomy Physiology II	3
BIMD 221L	Human Anatomy Physiology II Lab	1
CHEM 340	Survey of Organic Chemistry (CHEM 340 or higher organic chemistry) If CHEM 115 and CHEM 116 were taken then CHEM 340 is not required	4
CHEM 340L	Survey of Organic Chemistry Laboratory (CHEM 340L or high organic chemistry lab) If CHEM 115L and CHEM 116L have been taken then CHEM 340L is not required	1
Elective, Essential Studies (FA/HUM), or Option B		3
	Credits	**15**
Junior Year		
Fall		
N&D 335	World Food Patterns	3
N&D 344	Nutrition Education and Counseling	3
Elective, Essential Studies (FA/HUM), or Option B		9
	Credits	**15**
Spring		
N&D 345	Community Nutrition	3
N&D 348	Sports Nutrition	3
SOC 326 or PSYC 241	Sociological Statistics or Introduction to Statistics	3
Elective, Essential Studies (FA/HUM), or Option B		6
	Credits	**15**
Senior Year		
Fall		
N&D 310	Nutrition Assessment	3
N&D 494	Research in Nutrition and Dietetics	1
Elective, Essential Studies (FA/HUM), or Option B		11
	Credits	**15**
Spring		
N&D 441	Nutritional Biochemistry	4
N&D 497	Supervised Practice in Human Nutrition	4
Elective, Essential Studies (FA/HUM), or Option B		7
Must have a 2.2 GPA, satisfactory completion of service learning requirements, and prior or concurrent completion of N&D 344 and N&D 345. Must have a C or better in your nutrition, foods, and science courses. Application by October 20 for spring supervised practice or by March 20 for summer and fall supervised practice.		
	Credits	**15**
	Total Credits	**120**

Option B Courses (choose 4 courses from the list)

BIOL 150 General Biology I

BIOL 151 General Biology II

BIOL 341 Cell Biology

BIMD 301 Biochemistry

PPT 315 Human Pharmacology

PPT 410 Drugs Subject to Abuse

PSYC 250 Developmental Psychology

PSYC 355 Adulthood & Aging

SOC 352 Aging & Society

SOC 355 Drugs & Society

*Students may take CHEM 115/L and CHEM 116/L OR CHEM 121/L, CHEM 122/L, and CHEM 340/L (or higher organic chemistry).

N&D 497 Supervised Practice in Human Nutrition: Students must have a 2.2 GPA, satisfactory completion of service learning requirements, and prior or concurrent completion of N&D 344 and N&D 345. Application by October 20th for spring supervised practice or by March 20 for summer and fall supervised practice.

Every student must fulfill all University, Departmental, and Essential Studies requirements. (https://und.edu/academics/essential-studies/) Students must complete enough electives to bring total credit hours up to the 120.

N&D 100. Introduction to Nutrition and Dietetics. 1 Credit.
The philosophy, history, future trends, and career options in nutrition and dietetics will be discussed. S/U grading. S.

N&D 220. Foodservice Safety and Sanitation. 1 Credit.
Students learn about characteristics of microorganisms, food safety and sanitation practices, and federal regulations for foodservice operations. S.

N&D 240. Fundamentals of Nutrition. 3 Credits.
This introductory course focuses on basic elements of nutrition science. Emphasis is placed on nutrients, their functions and food sources, and discussion about how food behavior translates into nutritional health. The course also includes current topics such as fad diets, phytochemicals, and sports nutrition. Students learn to apply the principles of nutrition to their own food intake to improve their nutritional health. F,S,SS.

N&D 240L. Fundamentals of Nutrition Laboratory. 1 Credit.
Application of nutrition science to explore common food and nutrient misconceptions and current topics in nutritional health through hands-on, problem-solving activities. Students will use nutrient software to create reports and evaluate dietary intake. Prerequisite: MATH 98 or any higher-level mathematics course. Prerequisite or Corequisite: N&D 240. F,S,SS.

N&D 250. Current Trends in Nutrition. 3 Credits.
The course will examine contemporary food and nutrition matters with consideration of the factors influencing food selection and preparation as a means to improve nutritional status. The general goal is to enhance student awareness in regards to consumer food choices, with emphasis on knowledge and skills to apply healthy nutrition choices to consumers. Topics covered in the course include current food trends; basic culinary concepts; food demonstrations; dietary standards; food regulation; socio-economic and social circumstances influencing food selection, and food purchasing meal planning for individuals and families. Prerequisite or Corequisite: N&D 240. F.

N&D 260. Principles of Foods and Food Science. 3 Credits.
Introduction to food selection and preparation principles, sensory evaluation of food, role of ingredients, and food technology. Emphasizes application of scientific principles in relationship to food composition, physical properties, and chemical reactions during food preparation. Prerequisite: A college level chemistry course. S.

N&D 310. Nutrition Assessment. 3 Credits.
This course will use the Nutrition Care Process to examine methods for evaluating nutritional status of individuals and groups. Assessment techniques will be explored in the context of nutrition screening. Students will learn routine assessment measures such as client history, diet history, anthropometric and biochemical measures, and nutrient deficiencies. Prerequisite: N&D 240. F.

N&D 325. Nutrition Through the Life Cycle. 3 Credits.
Optimal growth and development throughout the lifespan requires proper nutrition that begins prior to conception. This course examines nutritional needs of Individuals rior to conception, during pregnancy and lactation, and throughout childhood, adolescence, and all of adulthood. The course will study the nutrient needs for each phase of the life cycle. Students will learn about the influence of nutrition on growth and development, as well as the physiological and developmental basis for food choice and dietary recommendations. Prerequisite: N&D 240. F.

N&D 335. World Food Patterns. 3 Credits.
Examination of the food patterns of selected world population groups considering the effect of social, cultural, and economic practices on nutritional values. F.

N&D 344. Nutrition Education and Counseling. 3 Credits.
Introduces students to counseling and learning theories for application with individuals and groups in clinical or community settings. Students will develop basic skills necessary to design and implement nutrition education programs and will practice application of principles learned in nutrition counseling. Prerequisite: N&D 240. F.

N&D 345. Community Nutrition. 3 Credits.
This course allows the student to develop the knowledge and skills necessary to plan programs and promote nutritional well-being to the public. Through readings, lectures and class discussions, students work in teams to select a community to assess, research it relative to interrelated health, social and economic concerns, and identify nutrition priorities that need to be addressed in that community. A graduated series of assignments culminates in a written program proposal and oral presentation to address the needs of the community. Students hone speaking and writing skills, and learn how to assess the work of others, to give helpful feedback, and to work effectively to complete group and individuals assignments. Corequisite: N&D 325 and N&D 344. S.

N&D 348. Sports Nutrition. 3 Credits.
Sports Nutrition is an overview of the specialized nutritional needs of recreational and competitive athletes. It presents the scientific basis for the role of food and nutrients during athletic training, performance, and recovery. Prerequisite: N&D 240. S.

N&D 350. Medical Nutrition Therapy I. 3 Credits.
An evidence-based study and application of the nutrition care process. This includes nutritional assessment techniques, pathophysiology in disease, and medical nutrition therapy for common medical conditions. Prerequisite: N&D 441. Corequisite: N&D 450. F.

N&D 380. Food Service Production and Management. 3 Credits.
Introduces students to the many facets of a quality and quantity food service department. Course content will apply concepts learned in N&D 250 - Consumer Food Issues and N&D 260 - Food Science to food service in a quantity setting. Students will apply management principles to the food service environment. Prerequisite: N&D 250 and N&D 260. Prerequisite or Corequisite: MGMT 300. S.

N&D 441. Nutritional Biochemistry. 4 Credits.
A comprehensive investigation of the nutritional needs of humans with emphasis on nutritional biochemistry and current issues. Prerequisite: A grade of C or better in N&D 240, CHEM 116 or CHEM 340, BIMD 220 and BIMD 221 or PPT 301. S.

N&D 450. Medical Nutrition Therapy II. 3 Credits.
An advanced level of evidence-based study and application of the nutrition care process. This includes pathophysiology in disease and medical nutrition therapy for medical conditions and comorbidities. Prerequisite: N&D 441. Corequisite: N&D 350. F.

N&D 480. Interprofessional Health Care. 1 Credit.
The focus of this course is learning to work effectively with an interprofessional health care team using a shared patient-centered approach. Case studies will be the primary teaching strategy used. Prerequisite: Senior standing in Dietetics. S/U grading. F.

N&D 488. Foundations of Dietetic Practice. 3 Credits.
This course introduces the student to responsibilities associated with dietetic professional practice. Professional issues related to dietetic practice includes the Code of Ethics, legal credentialing (licensure laws), Standards of Professional Performance and future trends in the profession. The goal is to provide an opportunity for students to learn and continue to use professional skills and resources characteristic of nutrition and dietetics professionals in preparation for life-long learning. Prerequisite: Enrollment in the Coordinated Program in Dietetics; senior status. S.

N&D 494. Research in Nutrition and Dietetics. 1-4 Credits.
This course will provide an introduction to the research process, responsible conduct in research, and explore major types of study design in nutrition. Students will examine the literature to evaluate evidence about nutrition problems and interventions. Prerequisite or Corequisite: PSYC 241 or SOC 326 or ECON 210 or MATH 321. Repeatable to 4.00 credits. F.

N&D 497. Supervised Practice in Human Nutrition. 1-6 Credits.
Development of professional skills and competencies in human nutrition through supervised practice with learning experiences requiring knowledge and theory be applied to simulated and real-life situations. Prerequisite: Enrollment in the Human Nutrition program; department consent required. Corequisite: N&D 344 and N&D 345. Repeatable to 6.00 credits. On demand.

N&D 498. Supervised Practice in Dietetics. 1-12 Credits.
Development of professional skills and competencies through planned learning experiences in which knowledge and theory are applied to simulated and real-life situations in nutrition and dietetics. Prerequisite: Instructor consent required. Repeatable to 31.00 credits. F,S.

N&D 499. Special Topics in Nutrition and Dietetics. 1-4 Credits.
Special topics and/or in depth independent study in selected content areas relative to nutrition and dietetics. Prerequisite: Instructor consent. Repeatable to 6.00 credits. On demand.