Human Nutrition and Food, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

BECOMING A DIETITIAN

The path to become a registered dietitian nutritionist includes a bachelor's and master's degree, completing a dietetic internship from an ACEND-accredited program, and passing the national registration exam. At WVU, students who wish to become a registered dietitian nutritionist must:

1. earn a bachelor's degree and complete the Didactic Program in Dietetics with a cumulative GPA of 2.5;
2. apply for and complete an ACEND-accredited dietetic internship program or Individual Supervised Practice Pathway;
3. pass the Commission on Dietetic Registration's dietetic registration exam;
4. gain licensure if required in your state of practice;
5. maintain continuing education. Note that in 2024, a graduate degree will be required to be eligible to take the Commission on Dietetic Registration exam. In addition to the ACEND-accredited DPD, WVU offers an ACEND-accredited dietetic internship associated with a master's degree. An undergraduate degree from WVU does not guarantee acceptance into the WVU dietetic internship.

This program of study is additionally a good pre-professional option for students who wish to pursue the professional school programs of human medicine and the allied health professions, such as physician assistant school and medical school.

Students are required to complete core courses as well as courses in food science, nutrition, food service management, psychology, chemistry, biology, physiology, and microbiology. Students are encouraged to select electives in areas that support anticipated career preferences, e.g., business, food science, nutritional biochemistry, advertising, writing, and exercise physiology. There are required electives for the Didactic Program in Dietetics, and students who wish to pursue a registered dietitian nutritionist pathway should declare the Area of Emphasis (AoE) in Dietetics during their sophomore year.

Students must meet cumulative GPA requirements of 2.5 or higher to receive a verification statement. After completion of the Didactic Program in Dietetics requirements and receiving a verification statement, seniors are eligible to apply for competitive dietetic internships by participating in a national match. Acceptance into an internship is not guaranteed. The dietetic internship involves an additional one to two years of education and supervised practice, depending on the site and whether graduate study is included. Upon completion of the internship (and a graduate degree beginning in 2024), the graduate is eligible to take the examination to become a Registered Dietitian Nutritionist (RDN). Students are also able to receive a verification statement to take the DTR (Diet Tech Registered) exam after graduation from our program with a 2.5 GPA or greater.

Admissions

- First-Time Freshman must meet WVU's first time freshman requirements (https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements/).
- Students transferring from another major within WVU must have a GPA >2.0.
- Students transferring from another institution must meet WVU's transfer admission requirements (https://admissions.wvu.edu/how-to-apply/transfer-students/#anchor-transferreqs).

ADMISSION REQUIREMENTS 2023-2024

The Admission Requirements above will be the same for the 2023-2024 Academic Year.

Major Code: 0728

Click here to view the Suggested Plan of Study (p. 4)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef/)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

F1 - Composition & Rhetoric
Human Nutrition and Food, B.S.

ENGL 101 & ENGL 102
or ENGL 103
Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing
F2A/F2B - Science & Technology 4-6
F3 - Math & Quantitative Reasoning 3-4
F4 - Society & Connections 3
F5 - Human Inquiry & the Past 3
F6 - The Arts & Creativity 3
F7 - Global Studies & Diversity 3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree) 9
Total Hours 31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

University Requirements 30
Human Nutrition and Food Program Requirements 52
Human Nutrition and Food Major Requirements 38
Total Hours 120

University Requirements
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)
Outstanding GEF Requirements 1, 6, and 7 12
ANRD 191 First-Year Seminar 1
General Electives 17
Total Hours 30

Human Nutrition and Food Program Requirements
MATH 124 Algebra with Applications (or higher math placement; minimum grade of C-) 3
STAT 211 Elementary Statistical Inference 3
or ECON 225 Elementary Business and Economics Statistics

Biology Requirement:

BIOL 101 & 101L
& BIOL 102
& BIOL 102L General Biology 1 and General Biology 1 Laboratory and General Biology 2 and General Biology 2 Laboratory
Or
BIOL 115 & 115L Principles of Biology and Principles of Biology Laboratory
CHEM 115 & 115L Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory
CHEM 116 & 116L Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory
Select one of the following: 4
CHEM 231 & 231L Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory
CHEM 233 & 233L Organic Chemistry 1 and Organic Chemistry 1 Laboratory
CHEM 234 & 234L Organic Chemistry 2 and Organic Chemistry 2 Laboratory
AGBI 410 or BIOC 339 Introductory Biochemistry

Students not taking CHEM 231 must take all of the following:

AGBI 410 or BIOC 339 Introductory Biochemistry 3
FDST 200  Food Science and Technology 3
MICB 200  Medical Microbiology 3
or AEM 341  General Microbiology 3
ANPH 301  Introduction to Animal Physiology 3
or PSIO 241  Elementary Physiology 3
or PSIO 441  Mechanisms of Body Function 3
ARE 110  Agribusiness Accounting 3
AGEE 421  Agricultural and Natural Resource Communications 3
or WVUE 270  Effective Public Speaking 3
BCOR 370  Principles of Management 3
or ARE 204  Agribusiness Management 3
or AGEE 220  Group Organization and Leadership 3
PSYC 101  Introduction to Psychology 3
PSYC 241  Introduction to Human Development 3
or PSYC 251  Introduction to Social Psychology 3
SOC 101  Introduction to Sociology 3
or ANTH 105  Introduction to Anthropology 3

**Total Hours**

Human Nutrition and Food Major Requirements

A minimum grade of C- required for all HN&F and HN&F elective courses.

HN&F 171  Introduction to Human Nutrition 3
HN&F 201  Professional Development in Dietetics 3
HN&F 271  Fundamentals of Nutrition 3
HN&F 348L  Science of Food Preparation Laboratory 3
HN&F 350  Cross-Cultural Cuisine 3
HN&F 355  Nutritional Assessment 3
HN&F 364  Nutrition Education & Counseling 3
HN&F 401  Senior Seminar in Nutrition (fulfills Capstone and Writing & Communication Skills requirement) 2

**Area of Emphasis or HN&F Electives** 15

HN&F 200  Nutrition/Activity/Health
HN&F 353  Food Service Systems Management
HN&F 460  Advanced Nutrition
HN&F 472  Community Nutrition
HN&F 473  Medical Nutrition Therapy 1
HN&F 474  Medical Nutrition Therapy 2
HN&F 491  Professional Field Experience
HN&F 495  Independent Study
HN&F 496  Senior Thesis
HN&F 497  Research
HN&F 512  Maternal and Child Nutrition
FDST 308  Food Plant Sanitation
FDST 365  Muscle Foods Technology
FDST 365L  Muscle Foods Technology Laboratory
FDST 445  Food Microbiology
FDST 445L  Food Microbiology Laboratory
FDST 450  Food Chemistry
AGBI 512  Nutritional Biochemistry
ANNU 361  Applied Nutrition
ANNU 362  Applied Nutrition 2

**Total Hours** 38
Suggested Plan of Study

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Total credit hours: 118

Area of Emphasis

- Dietetics

AREA OF EMPHASIS IN DIETETICS

A grade of C- or higher is required in all coursework*

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Total Hours: 15
Students must have a minimum GPA of 2.5 and have completed HN&F 201, 271 and CHEM 115 and 115L to be eligible for the Area of Emphasis in Dietetics. Students must declare the Area of Emphasis no later than September 1 of the academic year in which they will be requesting a verification statement. To receive a Didactic Program in Dietetics Verification Statement to sit for the Nutrition and Dietetics Technician Registered (NDTR) exam or to apply for dietetic internships students must graduate from the Human Nutrition & Foods major with a minimum GPA of 2.5, complete the Area of Emphasis in Dietetics, and earn a minimum grade of C- in all HN&F courses.

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Total credit hours: 118

Major Learning Outcomes

HUMAN NUTRITION AND FOODS

1. Graduates will acquire a high level of competency in the basic sciences required for disciplinary competency.
2. Graduates will integrate basic knowledge and managerial skills related to the nutritional and food science disciplines.
3. Graduates will acquire sufficient written and oral communication skills, problem solving and critical thinking skills to effectively impact lifelong societal and professional developments critical to their respective discipline of interest.

4. Graduates will attain depth of knowledge relative to the scope of subfields of human nutritional sciences.

**HN&F 126. Society and Food. 3 Hours.**
Exploration on a global basis of interactions of man and environment as reflected in food production systems. Relation of food supply and use in development or maintenance of social and political institutions.

**HN&F 171. Introduction to Human Nutrition. 3 Hours.**
Nutrient structure, metabolism, integrated function and their importance to human well-being during all stages of the life cycle. Current concerns and those of special interest to college students in meeting nutrient needs.

**HN&F 191. First-Year Seminar. 1-3 Hours.**
Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

**HN&F 200. Nutrition/Activity/Health. 3 Hours.**
PR: HN&F 171. An overview of how proper nutrition and physical activity relates to individual health and disease prevention.

**HN&F 201. Professional Development in Dietetics. 3 Hours.**
Introduction to the profession of dietetics with emphasis on competencies, preparation for, and responsibilities associated with the profession.

**HN&F 271. Fundamentals of Nutrition. 3 Hours.**
PR: HN&F 171. The occurrence, uptake and metabolic roles of essential and key non-essential nutrients will be discussed in relation to growth, reproduction, and health in human subjects.

**HN&F 293. Special Topics. 1-6 Hours.**
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

**HN&F 298. Honors. 1-3 Hours.**
PR: Students in Honors Program and consent by the honors director. Independent reading, study or research.

**HN&F 348L. Science of Food Preparation Laboratory. 3 Hours.**
PR: (BIOL 101 or BIOL 115) and CHEM 115. To explore functional properties of ingredients and applied scientific theories to food preparation.

**HN&F 350. Cross-Cultural Cuisine. 3 Hours.**
PR: Corequisite of HN&F 350L. This course examines the evolution of human society and culture from a historical perspective as it relates to food and cuisine. Economic and religious influences on dietary patterns and nutritional health are also explored.

**HN&F 350L. Cross-Cultural Cuisine Laboratory. 0 Hours.**

**HN&F 353. Food Service Systems Management. 3 Hours.**
PR: HN&F 171 and (HN&F 350 or MATH 124 or higher) and Coreq: HN&F 353L. Introduction to food service systems and systems management. Principles of quantity food production management: production schedules, portion control, financial management, layout and equipment planning, evaluation of alternative systems, and computer applications.

**HN&F 353L. Food Service Systems Management Laboratory. 0 Hours.**
Coreq: HN&F 353. Food Service Systems Management - HN&F 353 Laboratory.

**HN&F 355. Nutritional Assessment. 3 Hours.**
PR: HN&F 271. This course will provide students with the knowledge needed to interpret nutrition-related lab values and anthropometric data, identify how nutrition is related to disease prevention, understand clinical and biochemical assessments of nutritional status and how nutritional assessment can be applied in dietetics practices.

**HN&F 364. Nutrition Education & Counseling. 3 Hours.**
PR: HN&F 271. Roles, responsibilities, and limitations of the professional health/nutrition educator in nutrition counseling, guidance and referral, nutrition needs assessment, dynamics of nutrition counseling interaction, and selected counseling techniques.

**HN&F 393. Special Topics. 1-6 Hours.**
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

**HN&F 401. Senior Seminar in Nutrition. 2 Hours.**
The course provides an integrative approach to various topics related to the practice of dietetics by challenging students to read, critique/evaluate, present, and discuss current research.

**HN&F 460. Advanced Nutrition. 3 Hours.**
HN&F 472. Community Nutrition. 3 Hours.
PR: HN&F 171. Beginning planning for community nutrition to individuals and families at various stages of the life cycle. Roles of concerned agencies and professional groups. Clinical experience in community facilities.

HN&F 473. Medical Nutrition Therapy 1. 3 Hours.
PR: HN&F 171 or consent. Nutrient analysis and introduction to nutrition experimentation; nutiritional assessment.

HN&F 474. Medical Nutrition Therapy 2. 3 Hours.
PR: HN&F 473 and (PSIO 241 or PSIO 441 or ANPH 301) or consent. Nutritional care aspects of patients. Modification of diet to meet human nutrition needs in various medical conditions.

HN&F 490. Teaching Practicum. 1-3 Hours.
PR: Consent. Teaching practice as a tutor or assistant.

HN&F 491. Professional Field Experience. 1-18 Hours.
PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiental learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

HN&F 493. Special Topics. 1-6 Hours.
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

HN&F 494. Seminar. 1-3 Hours.
PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

HN&F 495. Independent Study. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.

HN&F 496. Senior Thesis. 1-3 Hours.
PR: Consent.

HN&F 497. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. Grading may be S/U.

HN&F 498. Honors. 1-3 Hours.
PR: Students in Honors Program and consent by the honors director. Independent reading, study or research.