Bachelor of Science in Nutrition

Nutrition is an integrative science with the overall objective of improving the health and well-being of individuals and groups. Nutritional inquiry encompasses not only the roles of electrons, atoms, molecules, genes, cells, organs, and complex organisms in biological life processes but also the links between life science and health, behavior, education, population, culture, and economics. The Bachelor of Science in Nutrition degree program includes five options, including an opportunity to complete an honors thesis within the options, as described below.

For students pursuing careers in dietetics, courses in behavioral and clinical nutrition and food systems management provide the academic preparation required for dietetics practice. The Didactic Program in Dietetics (DPD, Option I) meets the coursework requirements that qualify undergraduates to apply to a graduate school in preparation for a dietetic internship or a graduate program/dietetic internship, which leads to the Registered Dietitian credential. Completion of the Didactic Program in Dietetics requirements qualifies a graduate to apply for a dietetic internship or to practice as a Dietetic Technician, Registered (DTR).

The Nutritional Sciences option (Option II) requires courses in science and research in order to prepare students for graduate study or professional school. Graduates may seek employment in private or publicly funded research programs or, upon completion of graduate study, may engage in college or university teaching or nutrition research. This option also allows students to fulfill requirements for postgraduate study in medicine, dentistry, and other health professions.

The Public Health Nutrition option (Option III) is designed to prepare students for positions in public health and nutrition at state and other health departments, in research, and in industry. It will equip them for entry into graduate programs in nutrition or other public health disciplines at schools of public health, at graduate schools in the biomedical sciences, and for entry into medical or other health professional schools as well as for those who pursue health and research careers.

Students who plan to follow Option IV must be admitted to the <u>Dean's</u> <u>Scholars Honors Program</u>. In addition to taking a core of research, writing, and seminar courses in the College of Natural Sciences, students in this option consult with the departmental honors advisor to develop a coherent individual program of rigorous and challenging courses from across the University.

In addition to the four Options leading to the Bachelor of Science in Nutrition, students may apply to Option V, the Integrated Coordinated Program in Dietetics (ICPD), which leads to simultaneous completion of the Bachelor of Science in Nutrition and the Master of Science in Nutritional Sciences. The ICPD includes both the coursework and the supervised practice necessary to be eligible to write the examination to become a registered dietitian. The DPD and ICPD are accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND) 120 S. Riverside Plaza, Suite 2000, Chicago IL 60606, (800) 877-1600.

Students in the DPD, Nutritional Science, and Public Health Nutrition options are eligible to apply for the Honors in Advanced Nutritional Sciences (HANS). This program is designed for students with a commitment to research that is focused on the intersection between nutrition and health processes. From their first semester to their last, HANS students meet regularly in small groups with some of the university's most gifted teachers and researchers. In the upper division courses, HANS students develop research projects in their field of study and write a substantial thesis on a related topic under the supervision of a nutrition faculty mentor.

Prescribed Work Common to All Options

In the process of fulfilling degree requirements, all students must complete:

- a. Core curriculum
- b. Skills and experience flags:
 - i. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
 - ii. Quantitative reasoning: one flagged course
 - iii. Global cultures: one flagged course
 - iv. Cultural diversity in the United States: one flagged course
 - v. Ethics: one flagged course
 - vi. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the <u>Course Schedule</u>. They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisors.

- 3. Foundation Nutrition Courses
 - i. Basic Nutrition: Nutrition 312
 - ii. Biochemistry: Nutrition 126L, 326, 342, 343
 - iii. Food Science: Nutrition 307 and 107L
 - iv. Nutrition Application: Nutrition 317L
 - v. Critical Thinking: Nutrition 339L and 338W Students must complete each course with a grade of at least C-
- 4. Foundation Science Courses
 - i. Biology: Biology 311C, 311D, and 325 OR 315H and 325H; and Integrative Biology 365S
 - ii. Chemistry: Chemistry 301, 302, 204, and 320M
 - iii. Biochemistry: Biochemistry 369
 - iv. Statistics: Statistics and Data Sciences 302F or 320E

5. At least 36 semester hours of upper-division coursework, of which at least 24 must be in nutrition. At least 21 semester hours of upperdivision coursework, including 18 semester hours in nutrition, must be completed in residence at the University.

Additional Prescribed Work for Each Option

Option I: Didactic Program in Dietetics (DPD)

Students who complete the DPD with at least four upper-division nutrition courses completed in residence will receive a verification statement that qualifies them to apply for an accredited supervised practice program. DPD graduates who complete an accredited supervised practice program and a master's degree (as of January 1, 2024) may become active members of the Academy of Nutrition and Dietetics and are eligible to write the examination to become a Registered Dietitian Nutritionist.

- At least three semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H and 113L
- 7. Statistics and Data Sciences 324E

- 8. Management: Management 320F, Foundations of Management and Organizational Behavior
- 9. Option-specific nutrition coursework:
 - i. Behavioral and clinical nutrition: Nutrition 315, 330L, 332, 370, and 371
 - ii. Food systems management: Nutrition 334 and 234L
 - Research: Six hours of the following: Nutrition 365 (Topic 5: Principles and Applications in Community Engagement) and 365L; OR Nutrition 327L and three hours chosen from Nutrition 353, 355, 355H, 379H, or Nutrition 365, Selected Topics in Nutritional Sciences
 - iv. Professional development: Nutrition 162
- 10. DPD Honors: Students pursuing the honors thesis (HANS) must take six hours of Nutrition 355H and six hours of Nutrition 379H.
- 11. Enough additional coursework to make a total of 120 semester hours (ICPD) or 126 semester hours (DPD)

Option II: Nutritional Sciences

- f. At least three semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H, and 113L
- g. Statistics and Data Sciences 324E
- h. Integrative Biology 446L
- i. Option-specific nutrition coursework:
 - i. Molecular nutrition: Nutrition 366L and Nutrition 365 (Topics in Nutritional Sciences); (Nutrition 365 (Topic 5: Principles and Applications in Community Engagement)/365L cannot be counted toward this requirement); the same topic of Nutrition 365 may not be counted twice.
 - ii. Additional nutrition coursework: nine hours selected from the following: Nutrition 315, 321, 330L, 331, 332, 370, 371.
 - Research: Three semester hours of coursework chosen from Nutrition 355 or 355H, 379H, Biology 325L, Molecular Biosciences 331L, 326M, and Biochemistry 369L
 - iv. Students pursuing the honors thesis (HANS) must take six hours of Nutrition 355H and six hours of Nutrition 379H.
- j. Enough additional coursework to make a total of 120 semester hours

Option III: Public Health Nutrition

- 6. Three semester hours chosen Sociology 308S, 319, and 354K
- 7. Three semester hours of Statistics and Data Sciences 324E
- At least six semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L and Human Development and Family Sciences 313 or 313H, and 113L
- 9. Three semester hours chosen from Geography 339K, 344K, Sociology 324K or 354K, Anthropology 301, Nursing 309, Human Development and Family Sciences 304, Psychology 304, 308, or Government 370I.
- 10. Public Health 317
- 11. Option-specific nutrition coursework:
 - i. Nutrition 315, 321, 331 and 332,
 - Twelve semester hours chosen from Nutrition 316, 352, 353, 355, 355H, 365 (Topics in Nutritional Sciences), or Nutrition 379H. The same topic of Nutrition 365 may not be counted twice.
- 12. Students pursuing the honors thesis (HANS) must take six hours of Nutrition 355H and six hours of Nutrition 379H.
- 13. Enough additional coursework to make a total of 120 semester hours

Option IV: Nutrition Honors: Dean's Scholars Honors Program

- 6. Breadth requirement: A calculus course and a statistics course, one of which must be a designated honors course; Biology 315H and 325H; Chemistry 301C and 302C; and three additional hours of honors-designated or approved coursework in biology, chemistry, computer science, mathematics, statistics and data sciences, or physics; credit earned by examination may not be counted toward this requirement.
- 7. At least three semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H and 113L
- 8. Chemistry 320N
- 9. Integrative Biology 446L
- 10. Nutrition 366L and Nutrition 365, Selected Topics in Nutritional Sciences
- 11. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors advisor
- 12. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- 13. Six hours of Nutrition 355H and six hours of Nutrition 379H
- 14. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 15. Enough additional coursework to make a total of 120 semester hours

Option V: Integrated Coordinated Program in Dietetics (ICPD)

Students interested in the Integrated Coordinated Program in Dietetics must apply for admission after completing 60 semester hours of prerequisite coursework. Applicants to the ICPD must meet the requirements for admission to the Graduate School. Upon completing the ICPD, which includes approximately 1,000 hours of supervised practice and required graduate level course work, graduates will attain both a Bachelor of Science in Nutrition and a Master of Science in Nutritional Sciences and are eligible to write the examination to become a Registered Dietitian. The integrated program requires 120 semester credit hours (SCH) for the BS in Nutritional Science portion of the integrated program, as opposed to the 126 SCH minimum required for the BS in the Didactic Program in Dietetics degree alone. Students in the integrated program begin taking graduate courses as seniors. Students admitted to the Integrated Program will take and reserve for graduate credit Nutrition 380K (Topic 3: Experimental Design and Statistics) and Nutrition 394 (Topic 6: Study Design and Research Methods) replacing courses (Nutrition 339L and Nutrition 338W, respectively) that would otherwise be required in the regular/standalone BS in Nutritional Science program. If the graduate coursework is not successfully completed with a grade of at least B, the student must complete the requirements for the Didactic Program in Dietetics, including the required 126 SCH, to obtain a BS in Nutrition.

Students who are admitted to the ICPD should consult the faculty advisor each semester regarding order and choice of work. During the fourth year, the following courses must be taken in the indicated term: fall semester. Nutrition 245C; spring semester. Nutrition 345M, 372C, 372F, 373S; summer semester. Nutrition 374C and 374P. Because these courses are taught only once a year, a student who does not take them at the indicated time may be unable to complete the program.

 f. At least three semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H and 113L

- g. Management: Management 320F, Foundations of Management and Organizational Behavior
- h. Option-specific nutrition coursework:
 - i. Nutrition 327L
 - ii. Behavioral and clinical nutrition: Nutrition 315, 330L, 332, 370 and 371.
 - iii. Food systems management: Nutrition 334 and Nutrition 234L
 - iv. Research: Nutrition 373S
 - v. Professional development:Nutrition 245C
- i. An additional 15 semester hours of supervised practice: Nutrition 345M, 372C, 372F, 374C, and 374P.
- j. Enough additional coursework to make a total of 120 semester hours.

Special Requirements

Students in all options must fulfill both the University's <u>General</u> <u>Requirements</u> for graduation and the <u>college requirements</u>. They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the <u>General Information Catalog</u>.

To graduate with departmental honors (HANS), students must remain in good standing with an overall grade point average of at least 3.30 and an overall grade point average of 3.50 in all nutritional sciences courses. In addition, student research must be presented in an approved public forum, such as the college's annual <u>Undergraduate Research Forum</u>. Students who fail to maintain the required grade point average may be subject to dismissal from the HANS program. Under special circumstances and at the discretion of the nutritional sciences honors advisor, a student may be allowed to continue under academic review.