

NUTRITIONAL SCIENCES, BS

Interested in the wonderful world of nutrition and dietetics?
You have come to the right place!

It may seem rather simplistic at first glance - eat a little more of this, a little less of that - but the field nutrition and dietetics is far more complex and multifaceted than first meets the eye (and stomach!). Nutrition is a science that investigates the body's metabolic and physiological responses to the food we consume and explores the role of food and nutrients in the development, treatment, and prevention of disease. It grapples with understanding and leveraging the web of factors that shape what, when, how much, where, and with whom we eat. **Nutrition professionals can positively impact the lives of others** in many different ways including facilitating dietary behavior change, enhancing the food environment, and expanding food and nutrition security and reducing hunger among individuals, groups, and communities.

The **BS Nutritional Sciences degree** is designed to provide you with a strong foundation in the biological and social sciences in order to understand, navigate, interpret, apply, and communicate **evidence-based relationships between food, nutrients, eating behavior, and human health**. Courses offered by Nutritional Sciences faculty and staff also **respect and honor the important role food and food-related traditions serve in a multicultural, diverse society**. Additionally, the Nutritional Sciences degree is structured to be **highly customizable** so that you can pursue a program of study that aligns with your interests and career goals with room to pursue a minor and/or certificate program to further enhance your UWM academic experience.

Professional Titles/Credentials

The professional titles/credentials in the field of nutrition and dietetics include **Registered Dietitian (RD) or Registered Dietitian Nutritionist (RDN)** which requires at least a master's degree starting January 1, 2024, and **Nutrition & Dietetic Technician, Registered (NDTR)** which requires an associate degree or higher. You can earn these credentials by successfully completing a one (or more) programs accredited by the Accreditation Council for Education in Nutrition and Dietetics (<https://www.eatrightpro.org/acend/accredited-programs/about-accredited-programs/>) (ACEND) which include coursework and/or supervised practice, and then passing a national credentialing exam. Learn more about the various pathways to become an RDN or NDTR (<https://www.eatright.org/become-an-rdn-or-ndtr/>).

Although the BS Nutritional Sciences is not an ACEND-accredited program, your plan of study **can be customized to prepare you to apply to graduate-level dietetics programs including UWM's Master of Public Health (MPH) - Nutrition and Dietetics**. Most of the prerequisite courses required for admission to such programs are built directly into the degree. If you are interested in pursuing the RDN credential, **contact your advisor to add Pre-Dietetics to your undergraduate program of study**. More information can be found in the Pre-Dietetics section of the Catalog.

Beyond Dietetics

The BS Nutritional Sciences is also a valuable undergraduate degree even if you are not interested in pursuing the RDN credential. Because of required foundational coursework in the natural and social sciences, combined with the rich array of nutritional sciences courses, **you will graduate ready to apply your knowledge and skills in many professional settings** including (but by no means limited to) health care, food and nutraceutical industries, community nutrition and public health

organizations, and fitness/wellness companies. If you are interested in continuing their education beyond the bachelor's degree, **you will be well-positioned for graduate education in a wide-array of fields**, as well as for professional degree programs in public health, medicine, dentistry, pharmacy, and more!

Want to get started in the Nutritional Sciences major or sample some courses in this dynamic, exciting field of study?

Consider enrolling in one or more of these introductory courses (no prerequisites required):

- **NUTR 101 New Student Seminar in Nutritional Sciences & Pre-Dietetics.** This 1-credit fall course will introduce you to the field of nutritional sciences and dietetics, career opportunities, and how to maximize your time studying this discipline at UWM.
- **NUTR 110 Introduction to Food Principles & Preparation.** This 3-credit hands-on course is offered every fall and spring semester in the Applied Foods Lab in Enderis Hall. You will build life skills related to food preparation all the while learning more about nutritional sciences through the science of food.
- **NUTR 230 Health Aspects of Exercise and Nutrition.** This 3-credit course will introduce you to key concepts related to personal physical fitness and healthy eating. If you are interested in learning about and improving your own fitness and eating behaviors, this is a great class to take. Plus it counts as a Natural Science GER!
- **NUTR 235 Introduction to Nutrition for the Health Professions.** Ready to dive into the science behind how the nutrients in food are used by the human body and affect its function? This 3-credit course will help you develop a solid foundation in this field!
- **NUTR 241 Why We Eat What We Eat: An Ecological Approach.** To facilitate dietary change, it is critical to understand what drives behavior. This 3-credit course offered in the fall and summer offers you the opportunity to "dig-in" to the complex array of influences - both seen and unseen - that shape an individual's food choices and eating behavior. Plus it counts as a Social Science GER!

Nutritional Sciences students are advised by Kelsi Faust in the Zilber College of Public Health. You are encouraged to contact Kelsi at 414-251-6070 or meyer378@uwm.edu for guidance.

Nutrition: it's for everyBODY.

Requirements

All students must earn a minimum of 120 credits to complete the BS in Nutritional Sciences degree.

University General Education Requirements (GER)

Many of the University General Education Requirements are satisfied through the foundations coursework and the Nutritional Sciences major requirements. All students are eligible to pursue general education requirements and foundations courses associated with the curriculum as long as they meet the necessary prerequisites for each course. The UWM General Education Requirements (<https://catalog.uwm.edu/policies/undergraduate-policies/#bachelorsdegreeregulation>) are:

Code	Title	Credits
General Education Requirements		
<i>Competency Requirements</i>		

Oral and Written Communication (OWC) Part A	3
Oral and Written Communication (OWC) Part B ¹	
Quantitative Literacy (QL) Part A & B ¹	
Foreign Language	
<i>Distribution Requirements</i>	
Arts	3
Humanities ¹	
Natural Sciences ¹	
Social Sciences ¹	
Cultural Diversity ¹	

¹ Required courses in the curriculum satisfy these General Education Requirements.

Nutritional Sciences Major Requirements

To fulfill the requirements for the Nutritional Sciences Major, students must complete the following: (a) University General Education Requirements, (b) Foundation Courses, (c) Nutritional Sciences Required Courses, (d) Upper Level (300- or above) Nutritional Sciences Elective Courses, and (e) Elective Courses.

Code	Title	Credits
Foundation Courses ¹		
BIO SCI 150	Foundations of Biological Sciences I	4
BIO SCI 202	Anatomy and Physiology I	4
BIO SCI 203	Anatomy and Physiology II	4
CHEM 103	Survey of Biochemistry ²	3-5
or CHEM 501	Introduction to Biochemistry	
PH 101	Introduction to Public Health	3
Select one of the following:		3
PH 202	Public Health from Cells to Society II ²	
PH 302	Health and Disease: Concepts and Contexts	
PH 319	Introduction to Health Disparities	
PSYCH 101	Introduction to Psychology	3
or SOCIOL 101	Introduction to Sociology	
COMMUN 103	Public Speaking	3
KIN 270	Statistics in the Health Professions: Theory and Practice	3
Cultural Diversity + Humanities (Choose a course that meets both GER categories)		3
MATH 105	Introduction to College Algebra	3
or MATH 108	Algebraic Literacy II	
Select one of the following:		3
ENGLISH 205	Business Writing	
ENGLISH 207	Health Science Writing	
ENGLISH 310	Writing, Speaking, and Technoscience in the 21st Century	
Nutritional Sciences Courses		
NUTR 101	New Student Seminar in Nutritional Sciences & Pre-Dietetics	1
NUTR 110	Introduction to Food Principles & Preparation	3
NUTR 230	Health Aspects of Exercise and Nutrition	3

NUTR 235	Introduction to Nutrition for the Health Professions	3
or BMS 232	Introduction to Nutrition	
NUTR 241	Why We Eat What We Eat: An Ecological Approach	3
NUTR 245	Life Cycle Nutrition	3
NUTR 305	Hunger at Home: Food and Nutrition Security in Milwaukee County	3
NUTR 350	Nutrition Communication and Education	3
NUTR 355	Modifying Nutrition and Eating Behavior	3
NUTR 435	Nutrition and Disease Prevention	3
NUTR courses 300 level or above ³		6
NUTR 470	Nutritional Sciences Capstone Experience	3
Electives (credits will vary by student) ⁴		44
Total Credits		120

¹ Some courses listed in this section may also partially fulfill a student's General Education Requirements (<https://catalog.uwm.edu/policies/undergraduate-policies/#bachelorsdegreerequirededucation>).

² CHEM 103, CHEM 501, and PH 202 have one (or more) prerequisites that must be satisfied before enrolling.

³ Students planning to apply to UWM's MPH-Nutrition and Dietetics Graduate Program (GP) should seek guidance from their undergraduate advisor about strategically satisfying the NUTR 300+ course requirement. The following courses are included in UWM's graduate program and must be taken at the graduate-level to count towards the graduate program's requirements: NUTR 430G, NUTR 555G, and NUTR 574G.

⁴ Students may select elective coursework that aligns with their interests, as well as educational and professional goals. The number of elective credits needed to meet the 120 credit requirement to be awarded the B.S. Nutritional Sciences degree will vary somewhat student to student depending upon the Chemistry sequence chosen.

Program Retention and Graduation Requirements

Nutritional Sciences program faculty and staff are deeply committed to facilitating student success. Regular open, honest communication with the Program Advisor, Program Director, and Program faculty and staff is strongly encouraged and will help students succeed in the program.

Students must maintain a minimum cumulative GPA of 2.50 and earn a grade of C or better in all Nutritional Sciences (NUTR) courses counting towards degree requirements. Should the need arise, Nutritional Sciences (NUTR) courses counting towards degree requirements may be repeated once; no courses repeat restrictions are placed on other courses. If a student's cumulative UWM GPA falls below 2.50, they will be placed on academic probation and encouraged to meet with the Program Advisor to develop an action plan. Students who remain on academic probation for more than two consecutive semesters, or exceed the course repeat policy, will be dismissed from the major and advised about other potential degree options.

To graduate with a B.S. in Nutritional Sciences, students must:

1. Complete a minimum of 120 credits.
2. Complete all University General Education Requirements (<https://catalog.uwm.edu/policies/undergraduate-policies/#bachelorsdegreeneeducation>).
3. Have earned credit in all required courses (including transfer courses) counting towards degree requirements.
4. Earn a minimum cumulative UWM GPA of 2.50 (including transfer courses) counting towards degree requirements.
5. Earn a grade of C or better in all NUTR courses (including transfer courses) counting towards degree requirements.
6. Complete the last 30 credits in residence at UWM.

The pursuit of a minor or certificate is encouraged and should easily integrate into a plan of study. Please consult with your advisor for guidance.

Considerations for students interested in dietetics and becoming a Registered Dietitian Nutritionist (RDN)

Becoming eligible to sit for the RDN credentialing exam requires a minimum of a master's degree, completion of an ACEND-accredited program(s) that includes specific coursework requirements and over 1,000 hours of supervised experiential learning.

UWM's BS in Nutritional Sciences can prepare students to pursue one of 80+ ACEND-accredited Graduate Programs (GP's) in dietetics (such as UWM's MPH-Nutrition and Dietetics program (<https://catalog.uwm.edu/public-health/nutrition-dietetics-mp/>)) or 50+ graduate-level Coordinated Programs (CP's) in dietetics available nationwide. These programs include all the "ingredients" necessary to sit for the RDN credentialing exam.

UWM's BS Nutritional Sciences is not an ACEND-accredited undergraduate Didactic Program in Dietetics (DPD). Thus, students would not be eligible to apply for stand-alone Dietetic Internships (DI's) that require a DPD verification statement.

Students interested in pursuing the RDN credential are encouraged to add Pre-dietetics (<https://catalog.uwm.edu/public-health/pre-dietetics/>) to their undergraduate plan of study. Pre-dietetics (<https://catalog.uwm.edu/public-health/pre-dietetics/>) includes the prerequisite courses required for admission to UWM's MPH-Nutrition and Dietetics program (<https://catalog.uwm.edu/public-health/nutrition-dietetics-mp/>); these courses are similar to the prerequisite courses required by other graduate-level programs in dietetics. Most, but not all, of the Pre-dietetics (<https://catalog.uwm.edu/public-health/pre-dietetics/>) courses are required as part of the Nutritional Sciences major. Depending on the graduate program, additional prerequisite courses may be required for admission consideration. Students should explore the specific admission requirements for any program they are interested in pursuing.

Maximizing admissions eligibility to an ACEND-accredited program

To maximize the likelihood of admission eligibility to an ACEND-accredited Graduate Program in Nutrition and Dietetics (GP) or a graduate-level Coordinated Program (CP), it is recommended that pre-dietetics students (<https://catalog.uwm.edu/public-health/pre-dietetics/>) strive to attain a 3.0 cumulative GPA (or higher), and a 3.0 GPA (or higher) with no grade lower than C for pre-dietetics courses. Admission eligibility requirements for UWM's MPH-Nutrition and Dietetics GP (<https://uwm.edu/publichealth/academics/mpn-nutrition-dietetics/#tab-qk79-apply>) are slightly more flexible.

As previously stated, students should explore the specific prerequisite coursework requirements for any GP or graduate-level CP they are interested in applying to as requirements do vary.

Chemistry course sequence considerations

Students planning to apply to UWM's MPH-Nutrition and Dietetics GP are welcome to choose the CHEM 101/CHEM 103 sequence or the CHEM 102/CHEM 104, CHEM 341, and CHEM 501 sequence.

If wishing to apply to other programs, students are strongly advised to pursue the following chemistry sequence: CHEM 102, CHEM 104, CHEM 341 (lab recommended), and CHEM 501. The CHEM 101/CHEM 103 will likely not be sufficient for admissions eligibility to most other ACEND-accredited graduate-level programs in nutrition and dietetics.

Plan of Study

Two sample plans of study are shown below: a general plan and one that integrates Pre-dietetics. Both assume that the student will satisfy (1) UWM's foreign language requirements with high school credits, and (2) the math and English proficiency requirements upon entry. Students specifically interested in pre-dietetics should refer to the relevant section of the UWM Catalog (<https://catalog.uwm.edu/public-health/pre-dietetics/>) and contact the Program Director or Program Advisor for Plan of Study guidance.

General Plan of Study

Year 1		
Semester 1		Credits
NUTR 101	New Student Seminar in Nutritional Sciences & Pre-Dietetics	1
NUTR 241 or NUTR 235	Why We Eat What We Eat: An Ecological Approach or Introduction to Nutrition for the Health Professions	3
BIO SCI 202	Anatomy and Physiology I	4
MATH 105 or MATH 108	Introduction to College Algebra or Algebraic Literacy II	3
GER - OWCA (ENGLISH 102 or equivalent)		3
Credits		14
Semester 2		
NUTR 230	Health Aspects of Exercise and Nutrition	3
PH 101	Introduction to Public Health	3
BIO SCI 203	Anatomy and Physiology II	4
CHEM 100	Chemical Science ¹	4
Cultural Diversity + Humanities		3
Credits		17
Year 2		
Semester 1		
NUTR 235 or NUTR 241	Introduction to Nutrition for the Health Professions or Why We Eat What We Eat: An Ecological Approach	3
CHEM 101	Chemical Science	5
BIO SCI 150	Foundations of Biological Sciences I	4
COMMUN 103	Public Speaking	3
Credits		15
Semester 2		
NUTR 110	Introduction to Food Principles & Preparation	3
NUTR 245	Life Cycle Nutrition	3
Select one of the following:		3
PH 202	Public Health from Cells to Society II	
PH 302	Health and Disease: Concepts and Contexts	
PH 319	Introduction to Health Disparities	
CHEM 103	Survey of Biochemistry	5
Credits		14

Year 3			Year 1		
Semester 1			Semester 1		Credits
NUTR 350	Nutrition Communication and Education	3	NUTR 101	New Student Seminar in Nutritional Sciences & Pre-Dietetics	
KIN 270	Statistics in the Health Professions: Theory and Practice	3			
Select one of the following:		3	NUTR 241 or NUTR 235	Why We Eat What We Eat: An Ecological Approach or Introduction to Nutrition for the Health Professions	3
ENGLISH 205	Business Writing		MATH 105 or MATH 108	Introduction to College Algebra or Algebraic Literacy II	3
ENGLISH 207	Health Science Writing		BIO SCI 202	Anatomy and Physiology I	4
ENGLISH 310	Writing, Speaking, and Technoscience in the 21st Century		GER - OWCA (ENGLISH 102 or equivalent)		3
PSYCH 101 or SOCIOL 101	Introduction to Psychology or Introduction to Sociology	3		Credits	14
Elective		3			
	Credits	15			
Semester 2			Semester 2		
NUTR 355	Modifying Nutrition and Eating Behavior	3	NUTR 230	Health Aspects of Exercise and Nutrition	3
NUTR 435	Nutrition and Disease Prevention	3	PSYCH 101 or SOCIOL 101	Introduction to Psychology or Introduction to Sociology	3
GER - Art		3	CHEM 100	Chemical Science ¹	4
Elective		3	BIO SCI 203	Anatomy and Physiology II	4
Elective		3	Cultural Diversity + Humanities		3
	Credits	15		Credits	17
Year 4			Year 2		
Semester 1			Semester 1		
NUTR 305	Hunger at Home: Food and Nutrition Security in Milwaukee County	3	NUTR 110	Introduction to Food Principles & Preparation	3
300+ level NUTR Course ²		3	NUTR 235 or NUTR 241	Introduction to Nutrition for the Health Professions or Why We Eat What We Eat: An Ecological Approach	3
Elective		3	PH 101	Introduction to Public Health	3
Elective		3	CHEM 102	General Chemistry	5
Elective		3	COMMUN 103	Public Speaking	3
	Credits	15		Credits	17
Semester 2			Semester 2		
NUTR 470	Nutritional Sciences Capstone Experience	3	NUTR 245	Life Cycle Nutrition	3
300+ level NUTR Course ²		3	CHEM 104	General Chemistry and Qualitative Analysis	5
Elective		3	BIO SCI 150	Foundations of Biological Sciences I	4
Elective		3	Select one of the following:		3
Elective		3	ENGLISH 205	Business Writing	
	Credits	15	ENGLISH 207	Health Science Writing	
	Total Credits	120	ENGLISH 310	Writing, Speaking, and Technoscience in the 21st Century	
				Credits	15
Year 3			Year 3		
Semester 1			Semester 1		
NUTR 305	Hunger at Home: Food and Nutrition Security in Milwaukee County	3	NUTR 305	Hunger at Home: Food and Nutrition Security in Milwaukee County	3
NUTR 350	Nutrition Communication and Education	3	NUTR 350	Nutrition Communication and Education	3
CHEM 341	Introductory Survey of Organic Chemistry	3	CHEM 341	Introductory Survey of Organic Chemistry	3
CHEM 342	Introductory Organic Chemistry Laboratory	2	CHEM 342	Introductory Organic Chemistry Laboratory	2
KIN 270	Statistics in the Health Professions: Theory and Practice	3	KIN 270	Statistics in the Health Professions: Theory and Practice	3
	Credits	14		Credits	14
Semester 2			Semester 2		
NUTR 355	Modifying Nutrition and Eating Behavior	3	NUTR 355	Modifying Nutrition and Eating Behavior	3
NUTR 435	Nutrition and Disease Prevention	3	NUTR 435	Nutrition and Disease Prevention	3
CHEM 501	Introduction to Biochemistry	3	CHEM 501	Introduction to Biochemistry	3
Select one of the following:		3	Select one of the following:		3
PH 202	Public Health from Cells to Society II		PH 202	Public Health from Cells to Society II	
PH 302	Health and Disease: Concepts and Contexts		PH 302	Health and Disease: Concepts and Contexts	
PH 319	Introduction to Health Disparities		PH 319	Introduction to Health Disparities	
Elective		3	Elective		3
	Credits	15		Credits	15
Year 4			Year 4		
Semester 1			Semester 1		
300+ level NUTR Course ²		3	300+ level NUTR Course ²		3
BIO SCI 101	General Survey of Microbiology	4	BIO SCI 101	General Survey of Microbiology	4
GER-Art		3	GER-Art		3
Elective		3	Elective		3

¹ CHEM 100 is recommended prior to enrolling in CHEM 101 or CHEM 102. Consult the program director or program advisor for guidance on which would be best for your career goals.

² Students planning to apply to UWM's MPH-Nutrition and Dietetics Graduate Program (GP) should seek guidance from their undergraduate advisor about strategically satisfying the NUTR 300+ course requirement. The following courses are included in UWM's graduate program and must be taken at the graduate-level to count towards the program's requirements: NUTR 430G, NUTR 555G, and NUTR 574G.

Recommended Plan for Pre-Dietetics (<https://catalog.uwm.edu/public-health/pre-dietetics/>) Students

Compared to the general plan of study, this one integrates a more rigorous chemistry sequence which will likely meet prerequisite requirements for most graduate-level programs in dietetics (UWM will welcome applicants with CHEM 101/CHEM 103 or the sequence shown in the plan below). This plan also integrates two additional courses (i.e., introduction to microbiology and medical terminology) that are also often required for admission to graduate programs in dietetics, including UWM's MPH-Nutrition and Dietetics program.

Elective		3
Credits		16
Semester 2		
300+ level NUTR Course ²		3
NUTR 470	Nutritional Sciences Capstone Experience	3
HS 222		3
Elective		3
Elective		3
Credits		15
Total Credits		123

¹ CHEM 100 is recommended prior to enrolling in CHEM 101 or CHEM 102. Consult the program director or program advisor for guidance on which would be best for your career goals.

² Students planning to apply to UWM's MPH-Nutrition and Dietetics Graduate Program (GP) should seek guidance from their program advisor about strategically satisfying the NUTR 300+ course requirement. The following courses are included in UWM's graduate program and must be taken at the graduate-level to count towards the program's requirements: NUTR 430G, NUTR 555G, and NUTR 574G.

Nutritional Sciences BS Learning Outcomes

Students graduating from the Nutritional Sciences program will be able to:

1. Recognize the relationship between food, nutrients, and human health and well-being.
2. Apply the principles of food chemistry and food safety in the preparation and handling of food.
3. Describe multiple determinants and levels of influence that shape food choice and eating behavior.
4. Discuss the dietary sources, function, metabolism, and symptoms and consequences of deficiency and toxicity of macro- and micronutrients.
5. Identify major physiological changes, nutrient requirements, and associated dietary implications for each stage of the life cycle.
6. Assess and evaluate dietary intake and eating behavior in relation to evidence-based dietary recommendations.
7. Explain the role of nutrition and dietary intake in disease prevention, development, and treatment.
8. Identify governmental and non-governmental agencies, programs, and policies that impact food and nutrition security, food safety, and public health.
9. Identify sources and attributes of credible and evidence-based food, nutrition, and diet-related information.
10. Develop nutrition-related resources that are evidence-based, and developmentally and culturally appropriate.

Honors in the Major

Honors in the major are granted to students who earn a GPA of 3.500 or above on a minimum of 30 completed credits at UWM.

Zilber College of Public Health Dean's Honor List

GPA of 3.750 or above, earned on a full-time student's GPA on 12 or more graded credits in a given semester.

Honors College Degree and Honors College Degree with Distinction

Granted to graduating seniors who complete Honors College requirements, as listed in the Honors College (<https://catalog.uwm.edu/honors-college/>) section of this site.

Commencement Honors

Students with a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester, will receive all-university commencement honors and be awarded the traditional gold cord at the December or May Honors Convocation. Please note that for honors calculation, the GPA is **not** rounded and is truncated at the third decimal (e.g., 3.499).

Final Honors

Earned on a minimum of 60 graded UWM credits: Cum Laude - 3.500 or above; Magna Cum Laude - 3.650 or above; Summa Cum Laude - 3.800 or above.