

NUTRITIONAL SCIENCES, BS

REQUIREMENTS

UNIVERSITY REQUIREMENTS

All undergraduate students must complete both the following Core General Education (Core GenEd) and University Degree and Quality of Work requirements. The requirements below apply to students whose first term at UW-Madison or whose earliest post-high school college attendance at any institution is Summer 2026 or later.

Students whose first term at UW-Madison or whose earliest post-high school college attendance at any institution occurred before Summer 2026 should refer to the archived Guide (<https://guide.wisc.edu/archive/>) for the requirements that apply to them.

CORE GENERAL EDUCATION (CORE GENED) REQUIREMENTS

Civics & Perspectives 3 credits of Civics & Perspectives coursework.

Communication & Literacy 6 credits of Communication & Literacy coursework. This requirement may be partially satisfied by a qualifying placement test score. For more information see this tiny url:

Humanities & Arts 6 credits of Humanities & Arts coursework.

Mathematics & Quantitative Reasoning 6 credits of Mathematics & Quantitative Reasoning coursework. This requirement may be partially satisfied by a qualifying placement test score. For more information see this tiny url:

Natural Science & Wellness Complete both:

- 6 credits of Natural Science & Wellness or Natural Science & Wellness + Laboratory coursework.
- one course must be in Natural Science & Wellness + Laboratory coursework.

Social & Behavioral Science 3 credits of Social & Behavioral Science coursework.

Total Credits 30 credits.

For more information see [this url].

UNIVERSITY DEGREE AND QUALITY OF WORK REQUIREMENTS

All undergraduate degree recipients must complete the following minimum requirements. Requirements for some programs will exceed these requirements; see program requirements for additional information.

Total Degree 120 degree credits.

Residency Complete 30 credits in residence. A course is considered "in residence" if it is taken when in undergraduate degree-seeking status and:

- is offered by UW-Madison and completed on the UW-Madison campus or at an approved off-site location, or
- is offered by UW-Madison in an online or distance format, or is completed during participation in a UW-Madison study abroad/study away program.

Quality of Work Achieve at least the minimum grade point average specified by the school, college, and/or academic program.

Math Demonstrate minimal mathematics competence by:

- placing above MATH#160;96,
- successfully completing MATH#160;96 at UW-Madison, or
- transferring the equivalent of MATH#160;96 or a more advanced mathematics course from another institution (content such as MATH#160;112, 114, 211, 221, 222, 234).

English Language If required to take the UW-Madison English as a Second Language Assessment Test (MSN-ESLAT), demonstrate minimal English language competence by:

- earning credit for ESL#160;118 at UW-Madison, or
- achieving a qualifying MSN-ESLAT placement test score.

Language Complete one:

- 2 high school units of a single language other than English, or
- one course with the second semester Language designation.

Major Declaration Declare and complete the requirements for at least one major.

COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies, Science, and Capstone), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

COLLEGE REQUIREMENTS FOR ALL CALS BS DEGREE PROGRAMS

Code	Title	Credits
	Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.	

Residency: Students must complete 30 degree credits in residence at UW–Madison after earning 86 credits toward their undergraduate degree.	
First year seminar (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses)	1
International studies (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSIInternationalStudiesCourses)	3
Physical science fundamentals	4-5
CHEM 103 General Chemistry I or CHEM 108 Chemistry in Our World or CHEM 109 Advanced General Chemistry	
Biological science	5
Additional science (biological, physical, or natural)	3
Science breadth (biological, physical, natural, or social)	3
CALS Capstone Learning Experience: included in the requirements for each CALS major (see "major requirements") (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement)	

MAJOR REQUIREMENTS

Code	Title	Credits
Mathematics and Statistics		
Complete one of the following (or may be satisfied by placement exam):		5-6
MATH 112 & MATH 113	College Algebra and Trigonometry	
MATH 114	Precalculus	
MATH 221	Calculus and Analytic Geometry 1	
Complete one of the following:		3-5
STAT 301	Introduction to Statistical Methods	
STAT 371	Introductory Applied Statistics for the Life Sciences	
Chemistry		
Complete one of the following:		5-9
CHEM 103 & CHEM 104	General Chemistry I and General Chemistry II	
CHEM 109	Advanced General Chemistry	
Organic Chemistry		
CHEM 343	Organic Chemistry I	3
CHEM 344	Introductory Organic Chemistry Laboratory	2
CHEM 345	Organic Chemistry II	3
Introductory Biology		
Complete one of the following options:		10
Option 1:		
BOTANY/ BIOLOGY 130	General Botany	
ZOOLOGY/ BIOLOGY 101	Animal Biology	
ZOOLOGY/ BIOLOGY 102	Animal Biology Laboratory	
Option 2:		

BIOLOGY/ BOTANY/ ZOOLOGY 151	Introductory Biology	
BIOLOGY/ BOTANY/ ZOOLOGY 152	Introductory Biology	
Option 3:		
BIOCORE 381	Evolution, Ecology, and Genetics	
BIOCORE 382	Evolution, Ecology, and Genetics Laboratory	
BIOCORE 383	Cellular Biology	
BIOCORE 384	Cellular Biology Laboratory	
Nutritional Sciences Biology		
Complete one of the following options:		8-13
Option 1:		
ANAT&PHY 335	Physiology	
GENETICS 466	Principles of Genetics	
And complete one of the following: ¹		
MICROBIO 101 & MICROBIO 102	General Microbiology and General Microbiology Laboratory	
MICROBIO 303 & MICROBIO 304	Biology of Microorganisms and Biology of Microorganisms Laboratory	
Option 2: ²		
BIOCORE 485	Principles of Physiology	
BIOCORE 486	Principles of Physiology Laboratory	
BIOCORE 587	Biological Interactions	
Physics		
Complete one of the following:		8-10
PHYSICS 103 & PHYSICS 104	General Physics and General Physics	
PHYSICS 201 & PHYSICS 202	General Physics and General Physics	
PHYSICS 207 & PHYSICS 208	General Physics and General Physics	
Core		
NUTR SCI/AN SCI/ DY SCI 311	Comparative Animal Nutrition	3
or NUTR SCI 332	Human Nutritional Needs	
NUTR SCI 431	Nutrition in the Life Span	3
BIOCHEM/NUTR SCI 510	Nutritional Biochemistry and Metabolism	3
Complete one of the following:		3-7
BIOCHEM 501	Introduction to Biochemistry	
BIOCHEM 507 & BIOCHEM 508	General Biochemistry I and General Biochemistry II	
Electives within the Major		
Complete 6 credits from the following:		6
A A E/ NUTR SCI 350	World Hunger and Malnutrition	
ANAT&PHY 337	Human Anatomy	
ANAT&PHY 338	Human Anatomy Laboratory	
ANTHRO 365	Medical Anthropology	

BIOCHEM/ NUTR SCI 560	Principles of Human Disease and Biotechnology
BIOCHEM/ M M & I 575	Biology of Viruses ³
BIOCHEM/ NUTR SCI 645	Molecular Control of Metabolism and Metabolic Disease ⁴
C&E SOC/ SOC 533	Public Health in Rural & Urban Communities
CHEM 311	Chemistry Across the Periodic Table
CHEM 327	Fundamentals of Analytical Science
CHEM 329	Fundamentals of Analytical Science
DY SCI 378	Lactation Physiology
FOOD SCI/ AN SCI 321	Food Laws and Regulations
FOOD SCI/ MICROBIO 325	Food Microbiology
GENETICS 545	Genetics Laboratory
PLANTSCI 338	Plant Breeding and Biotechnology
PLANTSCI 360	Genetically Modified Crops: Science, Regulation & Controversy
MED HIST/ PHILOS 515	Public Health Ethics
MED HIST/ PHILOS 558	Ethical Issues in Health Care
M M & I/PATH- BIO 528	Immunology
NUTR SCI 375	Special Topics
NUTR SCI 377	Cultural Aspects of Food and Nutrition
NUTR SCI 379	Introduction to Epidemiology
NUTR SCI/INTER- AG 421	Global Health Field Experience
NUTR SCI/ KINES 525	Nutrition in Physical Activity and Health
NUTR SCI 500	Undergraduate Capstone Seminar Laboratory
NUTR SCI 540	Community Nutrition and Health Equity
NUTR SCI 618	Research Approaches in the Era of Precision Nutrition ³
NUTR SCI/ BIOCHEM 619	Advanced Nutrition: Intermediary Metabolism of Macronutrients ³
NUTR SCI/ POP HLTH 621	Introduction to Nutritional Epidemiology ³
NUTR SCI 627	Advanced Nutrition: Vitamins ³
NUTR SCI 631	Clinical Nutrition I
NUTR SCI 681	Senior Honors Thesis ⁴
NUTR SCI 682	Senior Honors Thesis ⁴
NUTR SCI 691	Senior Thesis-Nutrition ⁴
NUTR SCI 692	Senior Thesis ⁴
NUTR SCI 699	Special Problems ⁵
ONCOLOGY 401	Introduction to Experimental Oncology
PATH 404	Pathophysiologic Principles of Human Diseases

POP HLTH/ C&E SOC 370	Introduction to Public Health
ZOOLOGY 470	Introduction to Animal Development
ZOOLOGY 570	Cell Biology

Capstone

Complete one of the following:		1-8
NUTR SCI 500	Undergraduate Capstone Seminar Laboratory	
NUTR SCI 681 & NUTR SCI 682	Senior Honors Thesis and Senior Honors Thesis	
NUTR SCI 691 & NUTR SCI 692	Senior Thesis-Nutrition and Senior Thesis	
NUTR SCI 699	Special Problems ⁶	

Total Credits **66-91**

- Consult advisor about combining MICROBIO 303 with MICROBIO 102.
- If the Biocore sequence is taken to fulfill the first biology requirement, it must be taken to fulfill the second biology requirement.
- These courses are taught primarily to graduate students. Permission to enroll from instructor may be required.
- Note that for NUTR SCI 681/NUTR SCI 682 (Senior Honors Thesis) and NUTR SCI 691/NUTR SCI 692 (Senior Thesis), both courses in the sequence must be completed in order to earn a grade.
- May count up to 6 credits of NUTR SCI 699 Special Problems towards the electives requirement.
- Consult advisor regarding the possibility of completing NUTR SCI 699 Special Problems for capstone.

RECOMMENDED NUTRITIONAL SCIENCE ELECTIVES

Code	Title	Credits
ANTHRO 365	Medical Anthropology	3
BIOCHEM/ NUTR SCI 560	Principles of Human Disease and Biotechnology	2
BIOCHEM/ M M & I 575	Biology of Viruses	2
BIOCHEM/ NUTR SCI 645	Molecular Control of Metabolism and Metabolic Disease	3
C&E SOC/SOC 533	Public Health in Rural & Urban Communities	3
CHEM 311	Chemistry Across the Periodic Table	4
CHEM 327	Fundamentals of Analytical Science	4
CHEM 329	Fundamentals of Analytical Science	4
AN SCI/ FOOD SCI 305	Introduction to Meat Science and Technology	4
FOOD SCI/ AN SCI 321	Food Laws and Regulations	1
FOOD SCI/ MICROBIO 325	Food Microbiology	3
GENETICS 545	Genetics Laboratory	2
PLANTSCI 338	Plant Breeding and Biotechnology	3
PLANTSCI 360	Genetically Modified Crops: Science, Regulation & Controversy	2
ANAT&PHY 337	Human Anatomy	3
ANAT&PHY 338	Human Anatomy Laboratory	2

MED HIST/ PHILOS 515	Public Health Ethics	3
MED HIST/ PHILOS 558	Ethical Issues in Health Care	3
M M & I/ PATH- BIO 528	Immunology	3
NUTR SCI/ A A E 350	World Hunger and Malnutrition	3
NUTR SCI 375	Special Topics	1-4
NUTR SCI 377	Cultural Aspects of Food and Nutrition	3
NUTR SCI/ INTER- AG 421	Global Health Field Experience	1-4
NUTR SCI 500	Undergraduate Capstone Seminar Laboratory	1
NUTR SCI/ KINES 525	Nutrition in Physical Activity and Health	3
NUTR SCI 540	Community Nutrition and Health Equity	3
ONCOLOGY 401	Introduction to Experimental Oncology	2
PATH 404	Pathophysiologic Principles of Human Diseases	3
POP HLTH/ C&E SOC 370	Introduction to Public Health	3
ZOOLOGY 470	Introduction to Animal Development	3
ZOOLOGY 570	Cell Biology	3