

# GLOBAL HEALTH, BS

## REQUIREMENTS

### UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext>) section of the *Guide*.

General Education	• Breadth–Humanities/Literature/Arts: 6 credits
	• Breadth–Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
	• Breadth–Social Studies: 3 credits
	• Communication Part A Part B *
	• Ethnic Studies *
	• Quantitative Reasoning Part A Part B *

\* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

### 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 ( <a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses</a> )	1
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International studies ( <a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSIInternationalStudiesCourses">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSIInternationalStudiesCourses</a> )	3
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Physical science fundamentals	4-5
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CHEM 103	General Chemistry I
or CHEM 108	Chemistry in Our World
or CHEM 109	Advanced General Chemistry

Biological science	5
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Additional science (biological, physical, or natural)	3
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Science breadth (biological, physical, natural, or social)	3
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CALS Capstone Learning Experience: included in the requirements for each CALS major (see "major requirements") (<http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement>)

### MAJOR REQUIREMENTS

Code	Title	Credits
<b>Major Requirements Overview</b>		
Fundamental Courses		29
Core Courses		15
Depth Courses		15
Capstone		3
<b>Total Credits</b>		<b>62</b>

### FUNDAMENTAL COURSES

Code	Title	Credits
<b>Fundamental Course Requirements</b>		
<i>Mathematics: complete one sequence (or satisfy through placement exam)</i>		5-6
MATH 112 & MATH 113	Algebra and Trigonometry	
MATH 114	Algebra and Trigonometry	
MATH 171 & MATH 217	Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II	
<i>Statistics: complete one course</i>		3
STAT 371	Introductory Applied Statistics for the Life Sciences	
STAT 240	Data Science Modeling I	
STAT 301	Introduction to Statistical Methods	
<i>General Chemistry: complete one sequence</i>		5-10
CHEM 103 & CHEM 104	General Chemistry I and General Chemistry II	
CHEM 109	Advanced General Chemistry	
CHEM 115 & CHEM 116	Chemical Principles I and Chemical Principles II	
<i>Introductory Biology: complete one sequence</i>		10

BIOLOGY/ BOTANY/ ZOOLOGY 151 & BIOLOGY/ BOTANY/ ZOOLOGY 152	Introductory Biology and Introductory Biology	
ZOOLOGY/ BIOLOGY 101 & ZOOLOGY/ BIOLOGY 102 & BOTANY/ BIOLOGY 130	Animal Biology and Animal Biology Laboratory and General Botany	
BIOCORE 381 & BIOCORE 382 & BIOCORE 383 & BIOCORE 384	Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory and Cellular Biology and Cellular Biology Laboratory	
<i>Global Health Introductory Social Sciences</i>		6-8
Group A: complete one course (see list below)		
Group B: complete one course (see list below)		

**Total Credits** **29-37**

### Social Science Group A

Code	Title	Credits
AFROAMER 151	Introduction to Contemporary Afro-American Society	3
AMER IND 100	Introduction to American Indian Studies	3
ANTHRO 265	Introduction to Culture and Health	3
GEN&WS 102	Gender, Women, and Society in Global Perspective	3
GEN&WS 103	Gender, Women, Bodies, and Health	3
GEN&WS 104	Gender, Sexuality, and Global Health	3
GEN&WS/SOC 200	Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies	3-4
SOC 134	Sociology of Race & Ethnicity in the United States	3-4
SOC 170	Population Problems	3-4

### Social Science Group B

Code	Title	Credits
A A E 101	Introduction to Agricultural and Applied Economics	4
A A E/ENVIR ST 244	The Environment and the Global Economy	4
AGROECOL/ AGRONOMY/ C&E SOC/ENTOM/ ENVIR ST 103	Agroecology: An Introduction to the Ecology of Food and Agriculture	3
C&E SOC/SOC 140	Introduction to Community and Environmental Sociology	4
C&E SOC/ F&W ECOL/ SOC 248	Environment, Natural Resources, and Society	3
GEOG 101	Introduction to Human Geography	4

GEOG/ ENVIR ST 139	Global Environmental Issues	3
INTL ST 101	Introduction to International Studies	3-4
LSC 212	Introduction to Scientific Communication	3
LSC 251	Science, Media and Society	3
MED HIST/ ANTHRO 231	Introduction to Social Medicine	3
PHILOS 241	Introductory Ethics	3-4
POLI SCI 272	Introduction to Public Policy	3-4
RELIG ST 102	Exploring Religion in Sickness and Health	3

## CORE COURSES

Code	Title	Credits
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### Global Health Core Course Requirements

<i>Gateway Core Requirement: complete one course</i>		3
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ENTOM/ ENVIR ST 205	Our Planet, Our Health	
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<i>Public Health Core Requirement: complete one course</i>		3
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POP HLTH/ C&E SOC 370	Introduction to Public Health	
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ENTOM/ AGRONOMY/ NUTR SCI 203	Introduction to Global Health	
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<i>Food Systems and Health Core Requirement: complete one course</i>		3
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AGRONOMY 377	Global Food Production and Health	
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PL PATH 311	Global Food Security	
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<i>Environmental Health Core Requirement: complete one course</i>		3-4
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A A E 352	Global Health: Economics, Natural Systems, and Policy	
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HIST SCI/ ENVIR ST 213	Global Environmental Health: An Interdisciplinary Introduction	
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<i>Global Disease Biology and Epidemiology Core Requirement: complete one course</i>		3
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MICROBIO 345	Introduction to Disease Biology	
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NUTR SCI 379	Introduction to Epidemiology	
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**Total Credits** **15-16**

## DEPTH COURSES

Complete a minimum of 15 credits of depth courses, with at least 9 credits from one category and at least 6 credits from the other categories.

NUTR SCI/INTER-AG 421 Global Health Field Experience can count for a maximum of 3 credits in the additional 6 credits from this requirement.

Note: Courses used as Depth courses cannot double count as either core or capstone courses.

### Public Health, Policy, and Development Depth Electives

Code	Title	Credits
A A E/INTL ST 373	Globalization, Poverty and Development	3
C&E SOC/SOC 533	Public Health in Rural & Urban Communities	3

CSCS 410	Human Trafficking: Global and Local Perspectives	3	SOC/AMER IND/ C&E SOC 578	Poverty and Place	3
CSCS 470	The Human Rights of Children and Youth: Global and Local Perspectives	3	SOC/C&E SOC 630	Sociology of Developing Societies/ Third World	3
CSCS 500	Global Health and Communities: From Research to Praxis	3	<b>Food Systems and Nutrition Depth Electives</b>		
ECON/POP HLTH/ PUB AFFR 548	The Economics of Health Care	3-4	<b>Code</b>	<b>Title</b>	<b>Credits</b>
FRENCH 288	Doctors without Borders (Médecins Sans Frontières)	3	A A E 319	The International Agricultural Economy	3
GEN&WS 525	Gender and Global Health in Critical Perspective	3	A A E/ECON 477	Agricultural and Economic Development in Africa	3
GEN&WS 534	Gender, Sexuality, and Reproduction: Public Health Perspectives	3	AGRONOMY/ HORT 338	Plant Breeding and Biotechnology	3
GEN&WS/ INTL ST 535	Women's Global Health and Human Rights	3	AGRONOMY 377	Global Food Production and Health	3
GEN&WS/ HIST SCI 537	Childbirth in the United States	3	AN SCI/DY SCI 370	Livestock Production and Health in Agricultural Development	3
GEOG 307	International Migration, Health, and Human Rights	3	BIOCHEM/ NUTR SCI 510	Nutritional Biochemistry and Metabolism	3
HISTORY/ INTL ST 330	Global History of Humanitarianism	3-4	BOTANY/AMER IND/ ANTHRO 474	Ethnobotany	3-4
HIST SCI 360	Health Inequalities in the Long 20th Century	3	C&E SOC/A A E/ SOC 340	Issues in Food Systems	3-4
ISY E 417	Health Systems Engineering	3	C&E SOC/SOC 341	Labor in Global Food Systems	3
LEGAL ST 473	Health Impacts of Unmet Social Needs	3	DY SCI/ AGRONOMY 471	Food Production Systems and Sustainability	3
LSC/COM ARTS/ JOURN 617	Health Communication in the Information Age	3	DY SCI/AN SCI/ FOOD SCI/ SOIL SCI 472	Animal Agriculture and Global Sustainable Development	1
LSC 625	Risk Communication	3	DY SCI/AN SCI/ FOOD SCI/ SOIL SCI 473	International Field Study in Animal Agriculture and Sustainable Development	2
MED HIST/ PHILOS 505	Justice and Health Care	3	GEOG/ ENVIR ST 309	People, Land and Food: Comparative Study of Agriculture Systems	3
MED HIST/ HIST SCI 509	The Development of Public Health in America	3	HORT 350	Plants and Human Wellbeing	2
MED HIST/ PHILOS 515	Public Health Ethics	3	HORT/ AGRONOMY 360	Genetically Modified Crops: Science, Regulation & Controversy	2
MED HIST/ AFROAMER/ HIST SCI 523	Race, American Medicine and Public Health	3	HORT/ AGRONOMY 376	Tropical Horticultural Systems	2
MED HIST/ PHILOS 558	Ethical Issues in Health Care	3	HORT 380	Indigenous Foodways: Food and Seed Sovereignty	2
MED HIST/HIST SCI/ HISTORY 564	Disease, Medicine and Public Health in the History of Latin America and the Caribbean	3	MED HIST/ AGRONOMY/ C&E SOC/ PHILOS 565	The Ethics of Modern Biotechnology	3
NUTR SCI 379	Introduction to Epidemiology	3	MICROBIO/ FOOD SCI 325	Food Microbiology	3
POP HLTH/ C&E SOC 370	Introduction to Public Health	3	NUTR SCI 332	Human Nutritional Needs	3
POP HLTH/ HIST SCI/ MED HIST 553	International Health and Global Society	3	NUTR SCI/A A E/ AGRONOMY 350	World Hunger and Malnutrition	3
PUB AFFR 520	Inequality, Race and Public Policy	3	NUTR SCI 377	Cultural Aspects of Food and Nutrition	3
RELIG ST 475	Religion, Global and Public Health	3	NUTR SCI 431	Nutrition in the Life Span	3
SOC/C&E SOC 343	Sociology of Health and Medicine	3	PL PATH 311	Global Food Security	3
			SOIL SCI 301	General Soil Science	3

### Ecosystem Sustainability and Planetary Health Depth Electives

Code	Title	Credits
A A E/ECON/ ENVIR ST 343	Environmental Economics	3-4
A A E 352	Global Health: Economics, Natural Systems, and Policy	4
AGRONOMY/ BOTANY/ SOIL SCI 370	Grassland Ecology	3
ATM OCN/ ENVIR ST 355	Introduction to Air Quality	3
BOTANY/ F&W ECOL/ ZOOLOGY 460	General Ecology	4
BOTANY/ENVIR ST/ F&W ECOL/ ZOOLOGY 651	Conservation Biology	3
CIV ENGR/G L E 421	Environmental Sustainability Engineering	3
CIV ENGR 423	Air Pollution Effects, Measurement and Control	3
C&E SOC/ENVIR ST/ SOC 540	Sociology of International Development, Environment, and Sustainability	3
C&E SOC/SOC 541	Environmental Stewardship and Social Justice	3
ENTOM 490	Biodiversity and Global Change	3
ENVIR ST/ AMER IND 306	Indigenous Peoples and the Environment	3
ENVIR ST/ PHILOS 441	Environmental Ethics	3-4
ENVIR ST/ HISTORY 465	Global Environmental History	3-4
F&W ECOL/ ENVIR ST/ ZOOLOGY 360	Extinction of Species	3
GEOG/ATM OCN/ ENVIR ST 332	Global Warming: Science and Impacts	3
GEOG/ ENVIR ST 337	Nature, Power and Society	3
GEOG/ ENVIR ST 339	Environmental Conservation	4
GEOG/ENVIR ST/ F&W ECOL/ G L E/GEOSCI/ LAND ARC 371	Introduction to Environmental Remote Sensing	3
GEOG/CIV ENGR/ ENVIR ST 377	An Introduction to Geographic Information Systems	4
GEOG/ SOIL SCI 526	Human Transformations of Earth Surface Processes	3
LAND ARC 360	Earth Partnership Restoration Education: Indigenous Arts & Sciences	1
LAND ARC 363	Earth Partnership: Restoration Education for Equity and Resilience	3

M&ENVTOX/ CIV ENGR/ SOIL SCI 631	Toxicants in the Environment: Sources, Distribution, Fate, & Effects	3
M&ENVTOX/ AGRONOMY/ ENTOM/ F&W ECOL 632	Ecotoxicology: The Chemical Players	1
M&ENVTOX/ AGRONOMY/ ENTOM/ F&W ECOL 633	Ecotoxicology: Impacts on Individuals	1
M&ENVTOX/ AGRONOMY/ ENTOM/ F&W ECOL 634	Ecotoxicology: Impacts on Populations, Communities and Ecosystems	1
MICROBIO/ SOIL SCI 425	Environmental Microbiology	3
POP HLTH/ ENVIR ST 471	Introduction to Environmental Health	3
POP HLTH/ ENVIR ST 502	Air Pollution and Human Health	3
SOIL SCI/ PL PATH 323	Soil Biology	3
SOIL SCI/ ENVIR ST 324	Soils and Environmental Quality	3
URB R PL 550	Transportation and the Built Environment	3

### Disease Biology Depth Electives

Code	Title	Credits
ANAT&PHY 335	Physiology	5
ANAT&PHY 435	Fundamentals of Human Physiology	5
AN SCI/DY SCI 320	Animal Health and Disease	3
BIOCHEM 301	Survey of Biochemistry	3
BIOCHEM 501	Introduction to Biochemistry	3
BIOCORE 485	Principles of Physiology	3
BIOCHEM/ NUTR SCI 560	Principles of Human Disease and Biotechnology	2
BIOCORE 486	Principles of Physiology Laboratory	2
BIOCORE 587	Biological Interactions	3
ENTOM/ ZOOLOGY 371	Medical Entomology	3
GENETICS 466	Principles of Genetics	3
GENETICS 548	The Genomic Revolution	3
GENETICS/ MD GENET 565	Human Genetics	3
M M & I 301	Pathogenic Bacteriology	2
M M & I 341	Immunology	3
M M & I/PATH- BIO 528	Immunology	3
M M & I 554	Emerging Infectious Diseases and Bioterrorism	2
M M & I/ BIOCHEM 575	Biology of Viruses	2
MICROBIO 303	Biology of Microorganisms	3

MICROBIO 304	Biology of Microorganisms Laboratory	2
MICROBIO 330	Host-Parasite Interactions	3
MICROBIO/AN SCI/ BOTANY 335	The Microbiome of Plants, Animals, and Humans	3
MICROBIO 345	Introduction to Disease Biology	3
M&ENVTOX/ ONCOLOGY/ PHM SCI/PHMCOL- M/POP HLTH 625	Toxicology I	3
M&ENVTOX/PATH/ PHM SCI/PHMCOL- M/POP HLTH 626	Toxicology II	3
PATH 404	Pathophysiologic Principles of Human Diseases	3
PATH-BIO/ ENTOM/M M & I/ ZOOLOGY 350	Parasitology	3
SURG SCI/ F&W ECOL 548	Diseases of Wildlife	3

## CAPSTONE

Code	Title	Credits
<b>Global Health Capstone Requirement (complete one option)</b>		<b>3</b>
ENTOM 570	Systems Thinking in Global Health	
BIOCORE 587	Biological Interactions	
C&E SOC/ SOC 533	Public Health in Rural & Urban Communities	
CSCS 500	Global Health and Communities: From Research to Praxis	
DY SCI/ AGRONOMY 471	Food Production Systems and Sustainability	
GEN&WS/ INTL ST 535	Women's Global Health and Human Rights	

## UNIVERSITY DEGREE REQUIREMENTS

**Total Degree** To receive a bachelor's degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

**Residency** Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. "In residence" credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.

**Quality of Work** Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.