

GLOBAL DISEASE ECOLOGY (B.S.)

Required course work includes the university requirements (see regulation J-3 (<https://catalog.uidaho.edu/general-requirements-academic-procedures/j-general-requirements-baccalaureate-degrees/#j3>)), the general requirements for the B.S. degree, and:

Code	Title	Hours
Global Disease Ecology Core Courses		
AVS 109	The Science of Animals that Serve Humanity	4
BIOL 114	Organisms and Environments	4
BIOL 115	Cells and the Evolution of Life	3
BIOL 115L	Cells and the Evolution of Life Laboratory	1
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Laboratory	1
CHEM 112	General Chemistry II	4
CHEM 112L	General Chemistry II Laboratory	1
ENGL 102	Writing and Rhetoric II	3
ENT 322	General and Applied Entomology	4
PLSC 102	The Science of Plants in Agriculture	3
PHIL 103	Introduction to Ethics	3
SOC 101	Introduction to Sociology	3
SOIL 205	The Soil Ecosystem	3
STAT 251	Statistical Methods	3
MATH 160	Survey of Calculus	4
or MATH 170	Calculus I	
Choose one of the following:		3
CHEM 275	Carbon Compounds	
CHEM 277	Organic Chemistry I	
Choose one of the following:		3
ECON 201	Principles of Macroeconomics	
ECON 202	Principles of Microeconomics	
Choose one of the following:		3
BIOL 310	Genetics	
GENE 314	General Genetics	
Choose one of the following:		4
EPPN 154 & EPPN 155	Microbiology and the World Around Us and Microbiology and the World Around Us: Laboratory	
BIOL 250 & BIOL 255	General Microbiology and General Microbiology Lab	
Choose one of the following:		3
BIOL 300	Survey of Biochemistry	
BIOL 380	Biochemistry I	
Required Courses		
AVS 268	Companion Animal Diseases	2
AVS 371	Anatomy and Physiology	3
BIOL 312	Molecular and Cellular Biology	3
BIOL 444	Genomics	3
BIOL 447	Virology	3
ENT 438	Pesticides in the Environment	3

EPPN 110	Introduction to Global Disease Ecology	2
EPPN 220	Global Disease Ecology Seminar	2
PLSC 207	Introduction to Biotechnology	3
Elective		3
Choose one of the following:		3
BIOL 314	Ecology and Population Biology	
BIOL 426	Systems Biology	
Choose one of the following:		3
ENGL 207	Persuasive Writing	
ENGL 313	Business Writing	
ENGL 316	Environmental Writing	
ENGL 317	Technical Writing II	
ENGL 318	Science Writing	
Choose one of the following:		3
SOIL 425	Microbial Ecology	
ENT 441	Insect Ecology	
Choose one of the following:		3
ENT 411	Veterinary & Medical Entomology	
ENT 476	Medical Parasitology	
Select 3 credits from the following:		3
AGED 263	History of U.S. and World Agriculture	
AGED 406	Exploring International Agriculture	
AGED 407	Global Agricultural & Life Sciences Systems	
AGED 450	Leading People and Teams	
AGED 451	Communicating in Agriculture	
AGEC 356	Agricultural and Rural Policy	
AGEC 477	Law, Ethics, and the Environment	
ANTH 462	Human Issues in International Development	
CLDR 360	Leadership and Community Dynamics	
CLDR 480	Change and Power in a Global Society	
COMM 101	Fundamentals of Oral Communication	
AGED 101	Verbal Communication in Agriculture, Food, and Natural Resources	
COMM 335	Intercultural Communication	
ENVS 448	Drinking Water and Human Health	
HIST 379	History of Science II: 1700-Present	
HIST 380	Disease and Culture: History of Western Medicine	
HIST 424	American Environmental History	
IS 322	International Environmental Governance	
PSYC 473	Blood and Airborne Pathogens: HIV/STDs/ Hepatitis/TB	
SOC 340	Environmental Sociology and Globalization	
SOC 341	Science, Technology, and Society	
SOC 350	Food, Culture, and Society	
Select 3 credits from the following:		3
AVS 471	Animal Disease Management	
BIOL 432	Immunology	
FISH 424	Fish Health Management	
GEOG 313	Global Climate Change	
GEOG 350	Sustainability of Global Development	
GEOG 360	Population Dynamics and Distribution	
GEOG 430	Climate Change Ecology	

PLP 415	Plant Pathology
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Total Hours	108
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Courses to total 120 credits for this degree.

Fall Term 1		Hours
ENGL 101	Writing and Rhetoric I	3
AVS 109	The Science of Animals that Serve Humanity	4
MATH 143	Precalculus I: Algebra	3
PHIL 103	Introduction to Ethics	3
SOC 101	Introduction to Sociology	3
Hours		16

Spring Term 1		Hours
BIOL 114	Organisms and Environments	4
COMM 101 or AGED 101	Fundamentals of Oral Communication or Verbal Communication in Agriculture, Food, and Natural Resources	3
ENGL 102	Writing and Rhetoric II	3
EPPN 110	Introduction to Global Disease Ecology	2
MATH 160	Survey of Calculus	4
Hours		16

Fall Term 2		Hours
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Laboratory	1
PLSC 102	The Science of Plants in Agriculture	3
ECON 201 or ECON 202	Principles of Macroeconomics or Principles of Microeconomics	3
EPPN 220	Global Disease Ecology Seminar	2
Hours		12

Spring Term 2		Hours
BIOL 115	Cells and the Evolution of Life	3
BIOL 115L	Cells and the Evolution of Life Laboratory	1
CHEM 112	General Chemistry II	4
CHEM 112L	General Chemistry II Laboratory	1
STAT 251	Statistical Methods	3
EPPN 154	Microbiology and the World Around Us	3
EPPN 155	Microbiology and the World Around Us: Laboratory	1
Hours		16

Fall Term 3		Hours
BIOL 310	Genetics	3
AVS 371	Anatomy and Physiology	3
ENT 322	General and Applied Entomology	4
PLSC 207	Introduction to Biotechnology	3
BIOL 314 OR (ENGL 207 OR ENGL 313 OR ENGL 316 OR ENGL 317 OR ENGL 318)		3
Hours		16

Spring Term 3		Hours
BIOL 312	Molecular and Cellular Biology	3
CHEM 277 or CHEM 275	Organic Chemistry I or Carbon Compounds	3
EPPN 440	Research Practicum	3
SOIL 205	The Soil Ecosystem	3
BIOL 314 OR (ENGL 207 OR ENGL 313 OR ENGL 316 OR ENGL 317 OR ENGL 318)		3
Humanistic and Artistic Ways of Knowing Course		3
Hours		18

Fall Term 4		Hours
BIOL 300 or BIOL 380	Survey of Biochemistry or Biochemistry I	3
BIOL 444	Genomics	3
ENT 441	Insect Ecology	3
AVS 268	Companion Animal Diseases	2
American Diversity Course		3
Hours		14

Spring Term 4

AGED 406	Exploring International Agriculture (or other International Course)	3
ENT 438	Pesticides in the Environment	3
ENT 476 or ENT 411	Medical Parasitology or Veterinary & Medical Entomology	3
PLP 411 or BIOL 447	Viruses and Virus Diseases of Plants or Virology	3
AVS 471 OR BIOL 432 OR FISH 424 OR GEOG 313 OR GEOG 350 OR GEOG 360 OR GEOG 430 OR PLP 415		3
Hours		15
Total Hours		123

1. Global Disease Ecology students will learn to recognize, define and differentiate the causes and types of human, animal and plant diseases and apply this information using diverse thinking strategies to address real-world issues.
2. Global Disease Ecology students will be able to integrate information across the scientific disciplines including to implement disease control practices, solve problems, and make decisions that impact the sustainability of human health.
3. Global Disease Ecology students will be able to convey knowledge using verbal and non-verbal methods of communication in a respectful manner that reflects our complex society.