

GEP Natural Sciences

Requirement (7 credit hours)

- A total of seven credit hours from the university approved GEP Natural Sciences course list including at least one laboratory course or course with a laboratory.
- Special Note: If a student changes a General Education course except for HES courses from a letter grade to credit-only (S/U), then the course will not satisfy the GEP requirements. Consult your academic advisor if you have questions.

Double-counting

- A course taken to satisfy a Major requirement may also satisfy this requirement if the course is on the approved GEP Natural Sciences course list.
- A course that satisfies the Natural Sciences requirement may also satisfy the Global Knowledge or U.S. Diversity co-requisite if the course also exists on either university approved GEP co-requisite course list.
 - Note: Double-counting with U.S. Diversity applies to students matriculated prior to Fall 2023. Students matriculated after Fall 2023 may only double-count Global Knowledge.

Rationale

The natural sciences pursue basic questions about the workings of the universe, and the richness, variety and interconnectedness of the world around us. Students today are exposed to an increasing volume of information, from a large variety of sources, in diverse and changing formats. Training in the natural sciences is essential to help students develop skills to distinguish between testable and un-testable ideas, recognize scientifically valid tests of theories, and understand how information relates to those tests. By studying the natural sciences, students learn to reason both inductively and deductively, develop and test scientific hypotheses, and understand the value and limitations of scientific studies. The development and application of new technologies require scientifically literate citizens who can understand technological issues and evaluate the role of science in society's debate of those issues.

Category Objectives

Each course in the Natural Sciences will provide instruction and guidance that help students to:

- use the methods and processes of science in testing hypotheses, solving problems and making decisions; and
- make inferences from and articulate, scientific concepts, principles, laws, and theories, and apply this knowledge to problem solving.

Code	Title	Hours	Counts towards
AEC 203	An Introduction to the Honey Bee and Beekeeping	3	
AEC 437	Gut Microbial Ecology	3	
AEC 537	Gut Microbial Ecology	3	

ANS 105	Introduction to Companion Animal Science	3	
ANS 110	Introduction to Equine Science	3	
ANS 215	Agricultural Genetics	3	
BIO 105	Biology in the Modern World	3	
BIO 106	Biology in the Modern World Laboratory	1	
BIO 181	Introductory Biology: Ecology, Evolution, and Biodiversity	4	
BIO 183	Introductory Biology: Cellular and Molecular Biology	4	
BIO 227	Understanding Structural Diversity through Biological Illustration	3	IP
BIO 230	The Science of Studying Dinosaurs	3	IP
BIT 100	Current Topics in Biotechnology	4	IP
BIT 200	Early Research in Biotechnology	4	
BIT 210	Phage Hunters	3	
BIT 211	Phage Genomics	2	
CH 100	Chemistry and Society	4	
CH 101	Chemistry - A Molecular Science	3	
CH 102	General Chemistry Laboratory	1	
CH 103	General Chemistry I for Students in Chemical Sciences	3	
CH 104	General Chemistry Laboratory I for Students in Chemical Sciences	1	
CH 111	Preparatory Chemistry	3	
CH 201	Chemistry - A Quantitative Science	3	

CH 202	Quantitative Chemistry Laboratory	1	
CH 203	General Chemistry II for Students in Chemical Sciences	3	
CH 204	General Chemistry Laboratory II for Students in Chemical Sciences	1	
CS 210	Lawns and Sports Turf	3	
CS 213	Crop Science	3	
ENT 201	Insects and People	3	IP
ENT 207	Insects and Human Disease	3	GK, IP
ENT 305	Introduction to Forensic Entomology	3	
ENT 402	Forest Entomology	3	
ENT 425	General Entomology	3	
ES 113	Earth from Space	3	GK
FOR 318	Forest Pathology	3	
FOR 402	Forest Entomology	3	
FS 201	Introduction to Food Science	3	
FS 221	Discover: Chocolate, Coffee and Tea	3	
FS 222	Discover: Conventional, Organic and Genetically Engineered Foods	3	
FS 301	Introduction to Human Nutrition	3	
FW 221	Conservation of Natural Resources	3	GK, IP
GN 301	Genetics in Human Affairs	3	IP
HON 292	Honors Special Topics-Natural Sciences	3	
HS 200	Home Horticulture	3	
HS 201	The World of Horticulture: Principles and Practices	3	
HS 201A	The World of Horticulture: Principles and Practices	3	
HS 203	Home Plant Propagation	3	
HS 204	Home Landscape Maintenance	3	
HS 215	Agricultural Genetics	3	
HS 303	Ornamental Plant Identification I	3	
HS 304	Ornamental Plant Identification II	3	
MB 200	The Fourth Horseman: Plagues that Changed the World	3	IP
MB 210	Phage Hunters	3	
MB 211	Phage Genomics	2	
MEA 100	Earth System Science: Exploring the Connections	4	GK, IP
MEA 101	Geology I: Physical	3	
MEA 110	Geology I Laboratory	1	
MEA 130	Introduction to Weather and Climate	3	
MEA 135	Introduction to Weather and Climate Laboratory	1	
MEA 150	Environmental Issues in Water Resources	4	
MEA 200	Introduction to Oceanography	3	
MEA 202	Geology II: Historical	3	
MEA 210	Oceanography Lab	1	
MEA 211	Geology II Laboratory	1	
MEA 220	Marine Biology	3	
MEA 240	The Planets of Our Solar System	3	
MEA 250	Introduction to Coastal Environments	3	

NE 290	Introduction to Health Physics	3	IP
NE 291	Introduction to Health Physics Laboratory	1	IP
NSGK 295	Natural Sciences and Global Knowledge Special Topics	3	GK
NTR 301	Introduction to Human Nutrition	3	
PB 200	Plant Life	4	
PB 205	Our Green World	3	
PB 220	Local Flora	3	
PB 277	Space Biology	3	
PO 201	Poultry Science and Production	3	
PO 201A	Poultry Science and Production	3	
PO 202	Poultry Science and Production Laboratory	1	
PO 202A	Poultry Science and Production Laboratory	1	
PP 222	Kingdom of Fungi	3	
PP 318	Forest Pathology	3	
PY 123	Stellar and Galactic Astronomy	3	
PY 124	Solar System Astronomy	3	
PY 125	Astronomy Laboratory	1	
PY 131	Conceptual Physics	4	
PY 205	Physics for Engineers and Scientists I	3	
PY 206	Physics for Engineers and Scientists I Laboratory	1	
PY 208	Physics for Engineers and Scientists II	3	
PY 209	Physics for Engineers and Scientists II Laboratory	1	
PY 211	College Physics I	4	
PY 212	College Physics II	4	
SMT 202	Anatomy and Properties of Renewable Materials	3	

SSC 200	Soil Science	3
SSC 201	Soil Science Laboratory	1
TMS 211	Introduction to Fiber Science	3
TOX 201	Poisons, People and the Environment	3