

ENVIRONMENTAL SCIENCES (B.S.)

Requirements

Code	Title	Units
Core Curriculum Requirements (https://catalog.vanguard.edu/college/core-curriculum/)		54-52
Major Core Requirements		83
Total Units		137-135

Environmental Sciences Major Core Requirements

Code	Title	Units
Lower Division Course Requirements		
BIOL-111 & 111L	Principles of Cell and Molecular Biology and Principles of Biology Lab, Principles of Cell/ Molecular Biology Lab	4
CHEM-120 & 120L	General Chemistry I and General Chemistry I Lab	4
CHEM-121 & 121L	General Chemistry II and General Chemistry II Lab	4
CHEM-252 & 252L	Analytical Chemistry and Analytical Chem Techniques	4
ENVR-150C & 150CL	Intro to Environmental Science and Intro to Environmental Science Lab ¹	4
ENVR-205C & 205CL	Introduction to Geology and Introduction to Geology Laboratory	4
PSCI-215	Fundamentals of Earth Science	4
POLS-155C	American Democracy ¹	3
SOC-100C	Introduction to Sociology ¹	3
MATH-265C	Intro to Statistical Methods ¹	3
PSCI-130 & 130CL	Introduction to Physics I and General Physics I Lab	4
	or PSCI-223C/2 Mechanics of Solids and Fluids	
PSCI-131 & 131L	General Physics II and General Physics II Lab	4
	or PSCI-225/225L Electricity and Magnetism	
Upper Division Course Requirements		
CHEM-304 & 304L	Organic Chemistry I and Organic Chemistry Techniques I	4
CHEM-440 & 440L	Instrumental Analysis and Instrumental Analysis Lab	4
CHEM-485	Undergraduate Research	2
ENVR-305	Intro to Soil Sciences	3
ENVR-320	Hydrology	3
ENVR-335	Intro to Atmospheric Sciences	3
ENVR-405	Intro to Geo Info System (GIS)	3
ENVR-430	Environmental Policy and Impact Analysis	3
ENVR-499C	Capstone Seminar/Environmental Studies	2

BIOL-345C	Mountain Field Biology	4
BIOL-348C	Coastal Ecology	4
	or BIOL-346C Desert Field Ecology	
POLS-446	Public Policy Issues	3
	or SOC-230 Social Problems	

Total Units **83**

¹ Courses count towards the CORE Curriculum requirements.

Four Year Plan

Disclaimer: This *sample* Four Year Plan is provided as a guide for the recommended sequencing of courses. Vanguard University requires that students complete a minimum of 120 units of required course work as outlined on the Requirements tab in order to receive a Bachelor of Arts, Bachelor of Music, Bachelor of Science, or Bachelor of Science in Nursing degree. It is the student's responsibility to confirm with the department the course rotation before enrolling in courses. If applicable, please note the footnotes at the bottom of the page for additional information related to courses listed in a particular year and term. Questions, contact the Department of Chemical and Environmental Sciences.

Study Abroad Participation: Students interested in participating in the university's Study Abroad programs are encouraged to reach out to the Global Education and Outreach Office (studyabroad@vanguard.edu) for more information and collaboration in their academic course planning. Students using Education and Training Benefits through the U.S. Department of Veteran Affairs are encouraged to also reach out to the School Certifying Official (veteranscertifyingofficial@vanguard.edu) for more information regarding how benefits can be applied.

Course	Title	Units
Year 1 Term 1		
CORE-100C	Cornerstone	1
ENGL-120C	Persuasive Writing	3
ENVR-150C	Intro to Environmental Science	3
ENVR-150CL	Intro to Environmental Science Lab	1
CHEM-120	General Chemistry I	3
CHEM-120L	General Chemistry I Lab	1
NT-101C	New Testament Survey	3
Units		15
Year 1 Term 2		
BIOL-111	Principles of Cell and Molecular Biology	3
BIOL-111L	Principles of Biology Lab, Principles of Cell/ Molecular Biology Lab	1
KINE-146C	Lifetime Fitness/Well Activity	1
POLS-155C	American Democracy	3
THEO-PLHD	Theology Core Requirement	3
CHEM-121	General Chemistry II	3
CHEM-121L	General Chemistry II Lab	1
Units		15



Year 2 Term 1

CHEM-304	Organic Chemistry I	3
CHEM-304L	Organic Chemistry Techniques I	1
COMM-201C	Speech Composition and Presentation	3
MATH-265C	Intro to Statistical Methods	3
KINE-145C	Lifetime Fitness/Wellness Lect	1
PSCI-215C	Fundamentals of Earth Science	3
PSCI-215CL	Fundamentals of Earth Science Lab	1
Units		15

Year 2 Term 2

SOC-100C	Introduction to Sociology	3
OT-201C	Old Testament Survey	3
ENGL-220C	Researched Writing	3
BUSN-PLHDEC	Macro Or Micro Economics	3
SOC-PLCR	Social Science Core Curriculum Req'm't	3
Units		15

Year 3 Term 1

ENVR-335	Intro to Atmospheric Sciences	3
CHEM-252	Analytical Chemistry	3
CHEM-252L	Analytical Chem Techniques	1
ENGL-230C	Literature and the Human Experience	3
PSCI-PLGP1	Physics 1 Requirement	4
ENVR-205C	Introduction to Geology	3
ENVR-205CL	Introduction to Geology Laboratory	1
Units		18

Year 3 Term 2

PSCI-PLGP2	Physics 2 Requirement	4
ENVR-305	Intro to Soil Sciences	3
ENVR-305L	Intro to Soil Sciences Lab	1
ENVR-405	Intro to Geo Info System (GIS)	3
POLS-PLHD3	ENVR Application Requirement	3
BIOL-PLECO	Ecology Requirement	4
Units		18

Year 4 Term 1

HIST-PLCR2	History Core Requirement (World Civ)	3
CHEM-440	Instrumental Analysis	2
CHEM-440L	Instrumental Analysis Lab	2
CHEM-485	Undergraduate Research	1-4
THEO-300C	Developing a Christian World View	3
Units		11-14

Year 4 Term 2

FINA-PLCR	Fine Arts Core Curriculum Requirement	3
CHIS-400C	Christian Heritage	3
ENVR-499C	Capstone Seminar/Environmental Studies	2
ENVR-430	Environmental Policy and Impact Analysis	3
ENVR-320	Hydrology	3
Units		14

Total Units		121-124
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