

Environmental Education Certification (K–12)

The **Environmental Education Certification (K–12)** major is shared by the Division of Arts and Sciences and the Division of Education and Human Services, an academic partnership which highlights the program's focus on the University's *Mission* and the importance of collaboration and shared vision of environmental stewardship. Students enrolled in this major examine the human species' place in ecological interrelationships and, upon receipt of a Bachelor of Science degree in Environmental Education Certification (K–12), are prepared to educate others about the environment and its care.

By understanding the individual's role in environmental issues, students are challenged to apply their acquired knowledge in numerous service-learning experiences which foster their development as environmental stewards. These service-learning experiences operate in a wide range of contexts (i.e., basic schooling, informal education institutions like nature centers and museums, environmental agencies, and grassroots action groups) and allow Neumann students to impact on people of diverse ages, races, and socioeconomic status.

The Environmental Education Certification (K–12) major at Neumann University is truly interdisciplinary. The core premise of ecology is basic to the program and reflects the interrelationships between and among organisms and their environment. Since the human species is a part of these ecological systems, this program accounts for such environmental issues as the effects of human activity on a limited environment and the evolutionary consequences of those activities. As such, the Environmental Education Certification (K–12) major requires the integration of political, social, economic, ethical, and educational ideas within the context of ecology.

Students who wish to pursue this major are trained in the methodologies that are appropriate to helping children and adults understand ecological interrelationships and the nature of environmental stewardship. Students are also eligible to take the appropriate PRAXIS examinations for Teacher Certification (K–12).

Program Outcomes

Upon completion of this program, the graduate will earn a Bachelor of Science degree in Environmental Education Certification (K–12) and will be able to:

- Recognize the effects and evolutionary consequences of human activity within the context of complex ecological interrelationships, including environmental problems, consequences of potential alternatives, and the use of natural resources.
- Articulate the political, social, economic, and educational nature of human responses to environmental issues and problems.
- Apply questioning and analytic skills in understanding and addressing environmental problems and issues on both the local and global level.
- Develop personal and civic responsibility through the implementation of service-learning projects and/or internships focused on actions which redress specific environmental issues and problems.
- Understand the fundamental and defining characteristics/goals of the environmental movement and environmental education as well as the concomitant development of each.
- Understand and apply the professional responsibilities and exemplary educational practices of an environmentalist/environmental educator.
- Design and implement educational programs that facilitate K–12 and lifelong learning experiences which enhance environmental literacy.
- Develop effective interpersonal communication skills, evaluation, and reflection that allow for self-improvement in environmental stewardship.

Admission Criteria

Candidates for admission to the Environmental Education Certification (K–12) major must:

- Achieve a minimum cumulative GPA of 3.00 at the time of formal application to the major. Those seeking teacher certification must also earn a minimum grade of “B” in any required Education course taken prior to admission to the major **and** take all pre-professional tests of the PRAXIS. Please refer to the *Early Childhood/Elementary Education* and *Secondary Teacher Certification* sections of the catalog for more details.
- Make a formal application to the major in the Fall semester of the sophomore year.
- Schedule an interview with the Dean of the Division of Education and Human Services.

Progression Criteria/Degree Requirements

Progression in the Environmental Education Certification (K–12) major leading to a Bachelor of Science degree requires students to:

- Achieve a minimum grade of “B” for all major, cluster, and allied requirements.
- Maintain a minimum cumulative GPA of 3.00.
- Complete a minimum of 132 credits.

Course Requirements

Major Requirements

BIO 107/117*	General Biology I/Lab	3/1
BIO 201/211 ^{††}	Environmental Issues and Science/Lab	3/1
BIO 233/243	Ecology/Lab	3/1
BIO 234/244	Plant Biology/Lab	3/1
CHEM 101/111	Fundamentals of Chemistry/Lab	3/1
EDU 101 [†]	Teaching as a Profession.....	1
EDU 202 [†]	Educational Psychology.....	3
EDU 220 [†]	Foundation of Modern Education.....	3
EDU 248 [†]	Technology for Education	3
EDU 461	Senior Seminar I.....	1
EDU 462	Senior Seminar II	2
EDU 470*	Reading in the Content Area	3
EDU 496	Practicum in Environmental Education.....	12
ENV 105/115 ^{††}	Introduction to Environmental Studies/Lab	3/1
ENV 370/375 ^{††}	Environmental Education — Beyond the Classroom.....	3/1
	(Cross-referenced with EDU 370/375)	
ENV 385 ^{††}	Human Ecology	3
PHIL 255	Ethics and the Environment	3
PHYS 105	Physical Science.....	3
	Total.....	65

Allied Requirement

MATH 102**	Introductory Statistics	3
	Total.....	3

Environmental Cluster (Choose **four** of the following courses)

CA 330	Communications and Environmental Stewardship.....	3
HIST 290	Socioeconomics and History of the Environment.....	3
PHIL 312	Commerce and the Environment	3
PHIL 365	Indigenous Peoples, Sustainability, and the Environment	3
PHIL 385	The Philosophy of Ecology	3
POLSC 350	Politics and the Environment.....	3
	Total.....	12

General Electives	12
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- * Satisfies the *SCIENCE CORE* requirement.
- ** Satisfies the *MATH CORE* requirement.
- † Prerequisite for all Education [*EDU*] courses.
- †† Service learning component.
- **This course can only be taken when all requirements for admission to the Education major have been met.**

Note: Please refer to the *Course Descriptions* section of this catalog for Criminal Background Clearance information for all Education courses.

Environmental Education Certification (K–12) Suggested Four-Year Curriculum

FALL

Freshman

BIO 107/117 General Biology I/Lab.....	3/1
EDU 101 Teaching as a Profession	1
ENG 101 Effective Writing/Computers ...	3
ENV 105/115 Intro. Envir. Studies/Lab...3/1	
INT 101 Freshman Experience	1
HIST CORE	3
Total	16

SPRING

ENG 102 Research and Writing	3
MATH 102 Introductory Statistics	3
PHIL103 Introduction to Philosophy	3
PSYCH 101 General Psychology	3
THEO 104 Introduction to Theology.....	3
Total	15

Sophomore

BIO 233/243 Ecology/Lab.....	3/1
CHEM 101/111 Fund. of Chem./Lab ...	3/1
EDU 202 Educational Psychology	3
ENG LIT CORE	3
LANG CORE.....	3
Total	17

BIO 201/211 Envir. Issues & Sci./Lab	3/1
EDU 220 Found. of Modern Education.....	3
ENV Cluster Requirements.....	6
PHIL 102 Ethics.....	3
Total	16

Junior

ENV Cluster Requirement	3
FINE ARTS CORE.....	3
INT 202 Exploring Diversity	3
PHIL 255 Ethics and the Environment.....	3
PHYSC 105 Physical Science.....	3
THEO CORE (200-level or above)	3
Total	18

BIO 234/244 Plant Biology/Lab	3/1
CA 206 Effective Public Speaking	3
EDU 248 Technology for Education	3
EDU 470 Reading in the Content Area	3
ENV 370/375 Environmental Edu./Lab ...	3/1
Total	17

Senior

EDU 461 Senior Seminar I.....	1	EDU 462 Senior Seminar II.....	2
ENV Cluster Requirement.....	3	EDU 496 Practicum in Environmental	
ENV 385 Human Ecology.....	3	Education.....	12
General Electives.....	12		
Total.....	19	Total.....	14

TOTAL CREDITS UPON GRADUATION.....132