

ENVIRONMENTAL SCIENCE

www.laguardia.edu/environmentalscience

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Environmental Scientists study the interactions between human, biological, and physical systems on scales from local to global. They examine how the natural world is influenced by humans and explore challenges including conservation of biodiversity, water, air, and soil pollution, climate change, environmental justice, and the management of animals and plants. The Environmental Science Program, offered through the Natural Sciences Department, leads to an Associate of Science (AS) degree through either the Environmental Science or Sustainable Urban Agriculture tracks.

Both tracks include courses with fieldwork and hands-on research components. Students are introduced to interactions between organisms, their environment, and each other, including competition, predation, and pollination in the Fundamentals of Ecology course. The capstone course, Environmental Science, integrates the principles of global ecology with climate, technology, and sustainable development. The laboratory portion of Environmental Science emphasizes authentic research on projects related to local environmental issues and their solutions. Students also have an opportunity to complete internships at community based environmental organizations, pollution control stations, and city agencies.

The Sustainable Urban Agriculture track is designed to cultivate future leaders in urban agriculture who want to work in the rapidly growing green economy. The curriculum addresses the relationship of agriculture to issues including food security, resource use, climate change, and energy consumption. Courses include botany and soil science, with electives including environmental ethics and food science. The final sequence in this track is Sustainable Urban Agriculture and Sustainable Vegetable Production, where students receive practical training and experience in techniques including propagation, irrigation, and pest control, and conduct a field practicum in urban farming. Graduates of the track will be prepared to enter gardening, agriculture, hydroponics, community organizations, or agricultural businesses, or can choose to continue to a 4-year college.

The A.S. in Environmental Science articulates with Queens and Lehman Colleges, where graduates can transfer all 60 credits. In addition, the Environmental Science program prepares students for transfer and enrollment as an upper-level student at CUNY and other four-year colleges. A degree in Environmental Science will prepare students to transfer to a variety of academic programs in addition to Environmental Science, including Environmental Studies, Oceanography, Forest Management, Urban Sustainability, Zoology, Conservation Biology, Climatology, Geospatial technology, Urban Agriculture, Wildlife and Marine Science, Geology, and Hazardous Waste Technology.

The Environmental Science Program prepares students for successful transfer to four-year CUNY colleges in a variety of STEM majors. In addition, the A.S. in Environmental Science is fully articulated with the School of Earth and Environmental Sciences at Queens College. The School of Earth and Environmental Sciences provides an interdisciplinary approach to environmental science, allowing students to concentrate their studies in biology, chemistry or geology. Graduates of LaGuardia's Environmental Science Program transfer to Queens College with 60 credits to complete their Bachelor's degrees.

Environmental Science: AS Degree

PATHWAYS COMMON CORE: 31 CREDITS

This program has a waiver to require STEM courses in the Common Core.

A. REQUIRED CORE: 13 credits

English: 6 credits

- ENG101 English Composition I 3
(or ENA101 depending on placement scores)
- ENG102 Writing through Literature 3

Mathematical and Quantitative Reasoning: 3 credits

- Select one of the following courses:* 3
- MAT115 College Algebra and Trigonometry
- MAT117 Algebra and Trigonometry

Life & Physical Sciences: 4 credits

- SCB201 General Biology I (STEM) 4

B. FLEXIBLE CORE: 18 Credits

Select one course from each of the five flexible core categories AND one additional course from any flexible core category.

- World Cultures and Global Issues
- US Experience in its Diversity
- Creative Expression
- Individual and Society
- Scientific World – Students are advised to take SCB202 (General Biology II, 4cr.)

Students are advised to select one Urban Study course to complete college requirement. To complete the degree requirements from the Flexible Core, students are advised to select courses from the recommended course selections listed on the program website. Note: Student can select only two courses from any one discipline.

PROGRAM CORE: 28 CREDITS

Natural Sciences: 10 credits

- NSF101 First Year Seminar for Natural Sciences 2
- SCB265 Ecology 4
- SCG250 Environmental Science 4

Select one of the following options: 18 credits

Environmental Science

- SCB260 General Microbiology 4
- SCC201 General Chemistry I 4
- SCC202 General Chemistry II 4
- SCG150 Introduction to Geographic Information Systems 4
- Unrestricted Electives 2

Sustainable Urban Agriculture

- SCB200 Principles of Botany 4
- SCC110 Foundations of Chemistry 4
- SCG220 Soil Science 3
- SCG225 Sustainable Urban Agriculture 3
- SCG230 Sustainable Vegetable Production 3
- Unrestricted Elective 1

TOTAL CREDITS: 60



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