Environmental Science

Degree Type

Associate in Science

Type

Transfer

Division of STEAM

Associate Dean: Bradley Cole

The Environmental Science A.S. degree is designed to enable students to transfer to most baccalaureate institutions with standing as a junior. The program outcomes prepare students for "green" employment in industries that are targeting global climate change, management of natural resources, and protection of the environment. While completion of this degree alone prepares students for work as environmental technicians, continuation through transfer institutions qualifies the graduate for work as environmental engineers, educators, environmental field biologists, and other environmental scientists in both the public and private sector.

Students in this program must meet 7 of the 10 SUNY Knowledge and Skills areas, 2 core competencies (Critical Thinking and Information Literacy), and have 30 SUNY General Education credits. Please note that of the 7 Knowledge and Skills areas, the following 4 are required: Communication-Written and Oral; Mathematics and Quantitative Reasoning; Natural Sciences and Scientific Reasoning; and Diversity, Equity, Inclusion, and Social Justice. For more information on the SUNY General Education requirements please see General Education Requirements.

Graduates will demonstrate:

- A thorough understanding of the theoretical principles, processes, and relationships underlying the environmental sciences;
- An ability to apply this knowledge to a wide variety of practical situations;
- An understanding of the social, economic, political, and ethical issues related to the environmental sciences, perform relevant laboratory experiments and interpret data gathered from such experiments;
- The ability to critically analyze and formulate possible solutions to environmental issues.

Inherent in Corning Community College's mission is preparing students for a life of service to their professions and their communities in a globally interdependent society. The environmental analysis community is a key player in directing important public policy objectives related to quality of life issues, economic development, and environmental responsibility.

Program Requirements

| Title | Credits |
|--|--|
| College Communication | 3 |
| College Composition II | 3 |
| Environmental Ethics | 3 |
| MATH 1310 or higher | 6 |
| Social Science Elective | 3 |
| Diversity, Equity, Inclusion, Social Justice (DEI/SJ) Course | 3 |
| General Biology I | 4 |
| General Biology II | 4 |
| General Chemistry I | 4 |
| General Chemistry II | 4 |
| Environmental Science | 4 |
| Ecology | 4 |
| Environmental Geology | 4 |
| Environmental Science Electives | 7 |
| Wellness (Activity or Awareness) | 1 |
| Free Electives | 6 |
| Total Credits | 63 |
| | College Communication College Composition II Environmental Ethics MATH 1310 or higher Social Science Elective Diversity, Equity, Inclusion, Social Justice (DEI/SJ) Course General Biology I General Biology II General Chemistry I General Chemistry II Environmental Science Ecology Environmental Geology Environmental Science Electives Wellness (Activity or Awareness) Free Electives |

Course Sequencing

First Semester

Intended as a guide for academic planning. It need not be followed exactly or completed in four semesters.

| Item # | Title | Credits |
|-----------|----------------------------------|---------|
| ENGL 1110 | College Communication | 3 |
| CHEM 1510 | General Chemistry I | 4 |
| BIOL 1510 | General Biology I | 4 |
| BIOL 1500 | Environmental Science | 4 |
| | Wellness (Activity or Awareness) | 1 |

Second Semester

| Item # | Title | Credits |
|--|--------------------------|---------|
| ENGL 1020 | College Composition II | 3 |
| CHEM 1520 | General Chemistry II | 4 |
| BIOL 1520 | General Biology II | 4 |
| MATH 1310 or higher Social Sciences Elective | MATH 1310 or higher | 3 |
| | Social Sciences Elective | 3 |

Third Semester

| Item # | Title | Credits |
|-----------|--|---------|
| BIOL 2040 | Ecology | 4 |
| | MATH 1310 or higher | 3 |
| | Diversity, Equity, Inclusion, Social Justice (DEI/SJ) Course | 3 |
| | Environmental Science Elective | 4 |

Fourth Semester

| Item # | Title | Credits |
|-----------|--------------------------------|---------|
| PHIL 2200 | Environmental Ethics | 3 |
| GEOL 1530 | Environmental Geology | 4 |
| | Environmental Science Elective | 3 |
| | Free Electives | 6 |

Footnotes

<u>Program electives</u>: Select courses from the following to total 7 credit hours: BIOL 2010, BIOL 2050, BIOL 2060, BIOL 2080, CHEM 2010, CHEM 2020, GEOL 1510, PHYS 1730, PHYS 1740. Program electives option to be determined by desired transfer school program requirements. Please note that all courses identified as program electives are not offered both fall and spring semesters.

<u>Diversity, Equity, Inclusion, Social Justice (DEI/SJ) Course</u>: Select from: ENGL 2420, PHIL 1300, SOCI 1050, SOCI 2210.

ENGL 1110: Students may take ENGL 1010 and SPCH 1080 in place of ENGL 1110.

- * Students in this program who plan to transfer to a SUNY college can meet 21 credits of the general education requirement.
- * Based on placement, students might be required to take developmental and/or prerequisite classes before taking the required English and Math courses. Successful completion of some or all developmental courses may also be required before students can enroll in the science classes pertinent to this program.