*Science, Technology, Engineering & Mathematics Division*

**ENVIRONMENTAL SCIENCE**

The environmental field is a broad based area of study. It is truly interdisciplinary in nature. The subjects of biology, chemistry and geology are interwoven to provide a full picture of our environment and man’s impact upon this system.

The Environmental Science degree provides students with a foundation in the basic sciences and highlights the field’s interdisciplinary nature. The goal of the Environmental Science Program is to prepare students to transfer into a biological environmental science program at a four-year institution.

*General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.*

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| **Competency or Program Requirement** | **Course Number and Title** | Required Credits |
| **FIRST SEMESTER** |  |  |
| Continuing Learning and Information  Literacy/Ethics | Choose any Continuing Learning/  Information Literacy listed (CSA\*H105 or CSC\*H101 recommended) | 3 |
| Critical Analysis and Logical Thinking/  Written Communication | ENG\*H101 Composition | 3 |
| Quantitative Reasoning | MAT\*H172 College Algebra or higher | 3 |
| Scientific Reasoning1 | BIO\*H121 General Biology I **OR** BIO\*H155 General Botany | 4 |
| Program Requirement | GLG\*H121 Physical Geology (fall only) | 4 |
| **SECOND SEMESTER** |  |  |
| Written Communication | ENG\*H102 Literature & Composition  **OR** ENG\*H200 Advanced Composition  **OR** ENG\*H202 Technical Writing | 3 |
| Program Requirement1 | BIO\*H122 General Biology II  (spring only) **OR** BIO\*H145  General Zoology (spring only)1 | 4 |
| Program Requirement | MAT\*H167 Principles of Statistics | 3 |
| Program Requirement | ENV\*H110 Environmental  Regulations (spring only) | 3 |
| Program Requirement | BIO\*H181 Environmental  Science with Lab (spring only) | 4 |
| **THIRD SEMESTER** |  |  |
| Historical Knowledge and  Understanding | Choose any Historical Knowledge and Understanding listed | 3 |
| Oral Communication | Choose any Oral Communication listed | 3 |
| Scientific Knowledge | CHE\*H121 General Chemistry I | 4 |
| Program Requirement | BIO\*H171 Field Biology (fall only) | 4 |
| **FOURTH SEMESTER** |  |  |
| Aesthetic Dimensions/Written  Communication | Choose any Aesthetic Dimensions listed (except HRT\*H202) | 3 |
| Social Phenomena | Choose any Social Phenomena listed (GEO\*H102 is recommended) | 3 |
| Program Requirement | CHE\*H122 General Chemistry  II (spring only) | 4 |
| Program Requirement | BIO\*H235 Microbiology | 4 |

**Total Credits: 62**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

1 Enroll in either BIO\*H121 and BIO\*H122 sequence **OR** BIO\*H155 and BIO\*H145 sequence (BIO\*H155 and BIO\*H145 for SCSU transfer only).

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| 1. ***Program Outcomes*** |

*Upon successful completion of all program requirements, graduates will be able to:*

1. Research and assess the accuracy of information from print, online and media sources and be able to distinguish between scientific fact and media sensationalism.
2. Apply the scientific method to environmental problems using both laboratory and field skills to gather, analyze and interpret scientific data.
3. Scientifically analyze and critically evaluate local/regional/global environmental problems in terms of ecological principles and development of sustainable solutions.
4. Demonstrate knowledge of the interdisciplinary nature of environmental science with the fundamental principles of biology, chemistry, geology, law and public policy.
5. Describe the relationship between biotic organisms and the abiotic factors within an ecosystem.
6. Demonstrate knowledge gained from scientific investigation by appropriate written, oral and mathematical means as these skills are vital to success as an environmental profession.
7. Examine environmental problems and issues as well as establish personal positions on such issues and problems collaboratively.