## Conservation and Sustainability C.A.

Career Community: Science and Mathematics
Curriculum Code: 1844
Effective: Fall 2023 - Summer 2028

## Description

This certificate curriculum promotes entry-level technical knowledge, ethics, and rationale for a world view of sustainable practices in agriculture, alternative energy, business, construction, energy usage, natural resource management, and public policy. This certificate is for individuals seeking to enhance their employability by supplementing their existing credentials. Examples include those studying building trades or construction management seeking to implement sustainable building practices or students who hope to work in governmental and nongovernmental agencies who intend to apply or advocate for sustainability.

## Milestone

Completion of CHEM 151 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in this course is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in this course.

## Contact Information

For further information, including career options, course substitutions and waivers, etc., contact the Science Department, Arts and Sciences Building, Room 3203, telephone number 517-483-1092, or the Academic Advising Department, Gannon Building - StarZone, telephone number 517-483-1904.

Program of Study Required Courses

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| BIOL 127 | Cell Biology | $4 / 6$ |
| BIOL 128 | Organismal Biology | $4 / 6$ |
| CHEM 151 | General Chemistry Lecture I | $4 / 4$ |
| CHEM 161 | General Chemistry Lab I | $1 / 3$ |
| GEOL 230 | Environmental Geology | $4 / 6$ |
| MATH 120 | College Algebra | $4 / 4$ |

Program of Study Required Courses, Limited Choice - Architecture - Select one

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| ARCH 113 | Materials \& Methods of Constr. | $4 / 6$ |
| ARCH 275 | Sustainable Building Design | $4 / 6$ |

Program of Study Required Courses, Limited Choice - Biology - Select one

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| BIOL 120 | Environmental Science | $4 / 6$ |
| BIOL 210 | Natural Resource Conservation | $4 / 6$ |

Program of Study Required Courses, Limited Choice - English - Select one

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| ENGL 121 | Composition I | $4 / 4$ |
| ENGL 131 | Honors Composition I | $4 / 4$ |

Program of Study Required Courses, Limited Choice - Geography - Select one

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| GEOG 120 | Introduction to Geography | $3 / 3$ |
| GEOG 200 | World Regional Geography | $4 / 4$ |

## Minimum Total Credit Hours

36 credits / 48 billing hours

## Recommended Course Sequence

| Semester I |
| :--- |
| CHEM 151 - Milestone course |
| CHEM 161 |
| MATH 120 |
| Limited Choice - Geography |


| Semester II |
| :--- |
| BIOL 127 |
| Limited Choice - Biology |
| Limited Choice - English |


| Semester III |
| :--- |
| BIOL 128 |
| GEOL 230 |
| Limited Choice - Architecture |

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.

