



Environmental Science- Associate in Science (2022-2023 Catalog)

SEMESTER-BY-SEMESTER PROGRAM MAP FOR FULL-TIME STUDENTS

Courses are listed in preferred order of completion
Plans can be modified to fit student needs by adding more semesters

Choose your courses with your Advisor.

Developmental Education Courses (if required)		<input type="checkbox"/>	MATH020	Pre-Algebra	
<input type="checkbox"/>	ACLS050	Introduction to Academic Literacy	<input type="checkbox"/>	MATH022	Elementary Algebra
<input type="checkbox"/>	ENGL027	Writing Skills Workshop	<input type="checkbox"/>	MATH026	Intermediate Algebra

	complete	Course #	Course Title	Credits	Gen Ed	Pre-requisites / Co-requisites
Semester 1	<input type="checkbox"/>	COLS101	College Success	1		
	<input type="checkbox"/>	ENGL101	English I	3	Comm.	PRE: ENGL Placement Policy
	<input type="checkbox"/>	BIOS107	Biology I	4	Science	
	<input type="checkbox"/>	CHEM120	General Chemistry I	4	Science	PRE: MATH022 or placement, 1yr HS Chemistry or CHEM011, ENGL101 eligibility
	<input type="checkbox"/>	MATH	Math Elective+	3	QL	PRE: Math Placement Policy
	<input type="checkbox"/>		Environmental Concepts Elective++	3/4		
			Total Semester Credits:	18/19		
Semester 2	<input type="checkbox"/>	CMTH102	Introduction to Communication	3	Comm.	
	<input type="checkbox"/>	BIOS150	Biology II	4	Science	PRE: BIOS107
	<input type="checkbox"/>	CHEM220	General Chemistry II	4	Science	PRE: CHEM120
	<input type="checkbox"/>	ENGL151L	English II (Literature) (D)	3	Comm.	PRE: ENGL101
	<input type="checkbox"/>	MATH	Math Elective+	3	QL	PRE: Depends on course selected
			Total Semester Credits:	17		
Semester 3	<input type="checkbox"/>	BIOS206	General Ecology	4	Science	PRE: BIOS107 and BIOS150
	<input type="checkbox"/>	CHEM201G	Organic Chemistry I (WI)	4	Science	PRE: CHEM220 and ENGL101
	<input type="checkbox"/>		Environmental Concepts Elective++	3/4		
	<input type="checkbox"/>		AH, SIT or SSHB General Education Elective***	3	AH,SIT, or SSHB	
			Total Semester Credits:	13/14		
Semester 4	<input type="checkbox"/>	BIOS210	Environmental Biology	4	Science	PRE: BIOS107
	<input type="checkbox"/>	CHEM251	Organic Chemistry II	4	Science	PRE: CHEM201
	<input type="checkbox"/>		Environmental Concepts Elective++	3/4		
	<input type="checkbox"/>		AH, SIT or SSHB General Education Elective***	3	AH,SIT, or SSHB	
			Total Semester Credits:	14/15		
			Total Degree Credits	63-66		

General Education Requirements		
<input type="checkbox"/>	ENGL151L	Diversity
<input type="checkbox"/>	CHEM201G	Writing Intensive
<input type="checkbox"/>		Writing Intensive

Notes:

+Mathematics Electives options: MATH 140, 145, 150, 160, 175, 176, 180, 181, 210, 211.

++ Environmental Concepts Electives: Students are required to take three electives among the following courses: BIOS220, 230; GEOG 121, 140, 271; GEOL 201; HUMA 150.

***For the General Education Electives, students must select one course from the list of approved courses in two of the following categories: Arts & Humanities (AH); Social Science: Societies and Institutions over Time (SIT) and Social Science: Scientific Study of Human Behavior (SSHB).

Arts & Humanities (AH)	Societies & Institutions Over Time (SIT)	Writing Intensive Gen Ed Courses (WI)	Environmental Concepts Electives
ARTA 100 Art and Visual Thinking ARTA 101 Art History Survey THEA 110 Introduction to the Theatre THEA 111 Acting I THEA 115 Technical Theatre THEA 117 Stagecraft CMTH 126 The Communication Arts THEA 189 Stage Voice and Movement THEA 190 Stage Production THEA 206 Directing THEA 211 Plays: Classical to Contemp. (G-WI) THEA 212 Acting II THEA 218 Theatre Portfolio CMTH 220 Introduction to Film CMTH235 Understanding Culture Through Film DANC 101 Dance History DANC 110 Ballet I DANC 120 Modern Dance I DANC 130 Jazz I DANC 210 Ballet II DANC 220 Modern Dance II DANC 230 Jazz II ENGL 201 British Literature I (G-WI) ENGL 203 Shakespeare (G-WI) ENGL 205 American Literature I (G-WI) ENGL 211 Plays: Classical to Contemp. (G-WI) ENGL 215 Multicultural Adolescent Lit (G-WI) ENGL 250 Latin American Literature (G-WI) ENGL 251 British Literature II (G-WI) ENGL 253 Creative Writing ENGL 255 American Literature II (G-WI) ENGL 256 Modern Poetry (G-WI) ENGL 257 20th Century Lit by Women (G-WI) ENGL258 Fiction Writing ENGL 260 Contemporary Literature (G-WI) ENGL 264 Irish Literature (G-WI) ENGL 265 African-American Literature (G-WI) ENGL 267 Poetry Writing HUMA 121 The American Work Experience (G-WI) HUMA 140 Intro to Women & Gender Studies (G-WI) HUMA 150 Nature of the Environment HUMA210 Creativity and the Origin of Ideas JOUR 101 Journalism and Society Modern Language - All MDLA Courses MUSC 101 Introduction to Music PHIL 111 On Death and Dying (G-WI) PHIL 121 World Religions PHIL 201 Introduction to Philosophy PHIL 202 Ethics and Moral Problems (G-WI) PHIL 204 Asian Philosophies PHIL 211 Ancient Philosophy PHIL 215 Modern Philosophy PHIL220 Existentialism PHIL 225 What is Freedom?	CMTH 221 History of Broadcasting GEOG 101 World Geography GEOG 151 Geography of the U.S. and Canada (G-WI) GLBL 130 Intro to Global Studies GLBL 160 Field Experience & Acad Research in GS GLBL 230 Global Studies Capstone HIST 103 Ancient and Medieval History HIST 113 American History I (G-WI) HIST 121 The Black Experience (G-WI) HIST 123 African Civilization HIST 140 Modern Chinese History HIST 153 Found of Mod Euro History, 1300-1815 (G-WI) HIST 163 American History II HIST 165 The American Experience of Warfare (G-WI) HIST 166 Civil War and Reconstruction (G-WI) HIST 168 History of the Middle East (G-WI) HIST 169G History of Latinos in the US HIST 173 Mod European History, 1815 to Present (G-WI) HIST 183 Modern American History 1945-Present HIST 210 History of Mod Science, 1859 to Present HIST 211 History of Pennsylvania INTS 201 Implementing Sustainable Energy System... INTS 202 The Architecture of the City: Classic to Contemp. POLS 101 Introduction to Political Science POLS 105 American Constitutional Law (G-WI) POLS 110 American National Government (G-WI) POLS 150 Peace Studies & Conflict Resolution (Study Abroad) POLS 170 Politics of Modern Turkey (Study Abroad) POLS 202 International Relations POLS 205 Women and Politics (G-WI) POLS 251 State and Local Government (G-WI) SOCA 102 Cultural Anthropology (G-WI) SOCA 105 American Ethnicity SOCA 160 Issues in Contemp.Genocide & Mass Violence <div data-bbox="533 987 1077 1011" style="text-align: center;">Scientific Study of Human Behavior (SSHB)</div> CJST 101 Intro to Criminal Justice ECON 201 Macroeconomics FDST110 Food and Identity GEOG 121 Environmental Sustainability (G-WI) GEOG 140 Investigating Climate Change) GEOG 271 Intro to Geographic Info Systems HUMA 250 Research Methods in Social Sciences (G-WI) INTS 250 Study Abroad PSYC 103 Introduction to Psychology (G-WI) PSYC 205 Research Methods PSYC 230 Introduction to Health Psychology PSYC 235 Dev Child Psychopathology PSYC 245 Cognitive Psychology PSYC 255 Abnormal Psychology PSYC 258 Developmental Psychology (G-WI) PSYC 265 Psychology of Sex and Gender SOCA 103 Principles of Sociology (G-WI) SOCA 125 Sociology of Families (G-WI) SOCA 210 Sociology of Gender	BIOS105G Contemporary Biology THEA 211G Plays: Classical to Cont ENGL 201G British Literature I ENGL 203G Shakespeare ENGL 205G American Literature I ENGL 211G Plays: Classical to Contemporary ENGL 215G Multicultural Adolescent Literature ENGL 250G Latin American Literature ENGL 251G British Literature II ENGL 255G American Literature II ENGL 256G Modern Poetry ENGL 257G 20th Century Lit by Women ENGL 260G Contemporary Literature ENGL 264G Irish Literature ENGL 265G African-American Literature GEOG 121G Environmental Sustainability GEOG 151G Geography of the US & Canada HIST 113G American History I HIST 121G The Black Experience HIST 153G Found of Mod Euro Hist (1300-1815) HIST 165G The American Experience of Warfare HIST 166G Civil War and Reconstruction HIST 168G History of the Middle East HIST 169G History of Latinos in the US HIST 173G Mod Euro History, 1815 to Present HUMA 121G The American Work Experience HUMA 140G Intro to Women & Gender Studies HUMA250G Research Methods in the Social Sciences PHIL 111G On Death and Dying PHIL 202G Ethics and Moral Problems POLS 105G American Constitutional Law POLS 110G American National Government POLS 205G Women and Politics POLS 251G State and Local Government PSYC 103G Introduction to Psychology PSYC 258G Developmental Psychology SOCA 102G Cultural Anthropology SOCA 103G Principles of Sociology SOCA 125G Sociology of Families	BIOS 220 Field Zoology BIOS 230 Field Botany GEOG 121 Environmental Sustainability GEOG 140 Investigating Climate Change GEOG 271 Intro to Geographic Information Systems GEOL 201 Physical Geology HUMA 150 Nature of the Environment <div data-bbox="1625 284 2045 308" style="text-align: center;">Mathematics (Quantitative Literacy QL)</div> MATH 140 College Algebra MATH 145 Trigonometry MATH150 Introductory Statistics MATH160 PreCalculus MATH 165 Applied Calculus MATH 175 Calculus with Review (part 1) MATH 176 Calculus with Review (part 2) MATH 180 Calculus I MATH 181 Calculus II MATH 210 Calculus III MATH 211 Differential Equations

Program Narrative:

As an Environmental Science student, you will experience a broad and dynamic field that unites a number of disciplines so you can understand the biologic, hydrologic, geologic, and atmospheric components of the Earth and the role of human beings on the Earth. In addition, an information explosion has occurred in Environmental Science that will provide you with opportunities in many facets of the field. With a curriculum that parallels the first two years of most four-year programs, NCC can provide you with the foundational knowledge and skills in this expanding area of science in preparation for transfer to a four-year college or university program. NCC's program can be customized to prepare you for the range of majors and fields that are based in the environment, including laboratory sciences, wildlife conservation, resource management, environmental law, human ecology, and more. By working closely with an advisor, you can choose the right electives, and stay on track with the requirements of the transfer college of your choice.

Program Learning Outcomes: Graduates of the program will:

- Understand fundamental concepts of Environmental Science, interrelating the functions of living and nonliving systems and the role of humans in the environment.
- Demonstrate oral and written communication skills necessary for sharing discipline-specific knowledge and communicating professionally.
- Conduct scientific inquiry and research on environmental topics as those topics relate to science, technology, and society.
- Proficiently function in laboratory and field settings, demonstrating proper field techniques and using modern scientific instrumentation, including sampling and measuring devices as well as computer technology.
- Demonstrate understanding of the fundamentals of environmental safety to ensure both personal and group safety.
- Understand the use of the scientific method to interpret scientific data and make policy recommendations based on the data.