

ARTICULATION TRANSFER AGREEMENT
Siena Heights University
 Bachelor of Science Degree Major in Environmental Science
and
Washtenaw Community College
 Associate in Environmental Science Degree Liberal Arts Transfer
Summer 2012

Students must apply and be accepted to SIENA HEIGHTS UNIVERSITY

Requirements for Environmental Science at Washtenaw Community College	Equivalencies for Environmental Science at Siena Heights University B. S. Degree
GENERAL EDUCATION REQUIREMENTS	
ENG 111 Composition I	ENG 101 Reading and Writing I*
ENG 226 Composition II	ENG 102 Reading and Writing II*
COM 101 Fundamentals of Speaking or COM 183 Persuasion or COM 225 Intercultural Communication	TSC 101 Fundamentals of Speech Communication TSC 101 Fundamentals of Speech Communication TSC 101 Fundamentals of Speech Communication
MTH 178 Trigonometry	*
BIO 101 Concepts of Biology	No Equivalency
GLG 100 Introduction to Earth Science	NSC 110 Earth Science (not required)
ECO 211 Principles of Economics I or ECO 222 Principles of Economics II or GEO 101 or World Regional Geography or SOC 100 Principles of Sociology	ECO 222 Macroeconomics (not required for BS)* ECO 221 Microeconomics (not required for BS)* No Equivalency SOC 111 Introduction to Sociology
PHL 205 Ethics	PHI 220 Introduction to Ethics (not required for BS)
PLS 112 Introduction to American Government	PSC 130 American Democracy (not required for BS)
Arts/Humanities Elective	Not Required for BS
Computer Literature Elective	Not Required for BS
CORE COURSES	
ENV 101 Environmental Science I	ENV 110 Environmental Science
ENV 201 Environmental Science II	ENV 110 Environmental Science
MAJOR/AREA REQUIREMENTS	
CEM 111 General Chemistry	CHE 141 General Chemistry I
CPS 120 Introduction to Computer Science or CPS 161 An Introduction to Programming with Java or CPS 171 Introduction to Programming with C++	CIS 218 Intro. to Information Systems (not required for BS) No Equivalency No Equivalency
MTH 160 Basic Statistics	MAT 143 Statistics and Society*
PHY 111 General Physics I	No Equivalency
At Least One Elective Selection BIO 102, BIO 103, BIO 107, BIO 227, BIO 228, CEM 122, CEM 211, CEM 222, GLG 103, GLG 104, PHY 122, or Social Science MACRAO elective.	TBD
62 MINIMUM CREDITS	120 MINIMUM CREDITS

* This course also contributes to SHU Liberal Arts hours

SHU will accept up to 90 hours of transfer credit for the major, toward liberal arts, and for elective hours within the 120 hours required by the baccalaureate degree.

**Required for Completion of the Bachelor of Science in Environmental Science at
Siena Heights University**

Environmental Science--Bachelor of Science Degree Major UG12-14

A. Environmental Science Requirements--25 semester hours

1.	#ENV 110 Introduction Environmental Science	4	_____
2.	ENV 122 Geology	4	_____
3.	ENV 141 Climatology	3	_____
4.	ENV 152 Oceanography	3	_____
5.	ENV 351 Limnology	4	_____
6.	ENV 362 Toxicology	3	_____
7.	ENV 395 Junior Seminar in Env. Science I	1	_____
8.	ENV 396 Junior Seminar in Env. Science II	1	_____
9.	ENV 495 Senior Seminar in Env Science I	1	_____
10.	ENV 496 Senior Seminar in Env Science II	1	_____

B. Science Requirements--32 semester hours

1.	BIO 141 Basic Concepts of the Cell	4	_____
2.	BIO 241 Animal Biology	4	_____
3.	BIO 441 Ecology	4	_____
4.	CHE 141 General Chemistry I	4	_____
5.	CHE 142 General Chemistry II	4	_____
6.	CHE 350 Analytical Chemistry	4	_____
7.	PHY 241/261 Physics I	4	_____
8.	PHY 242/262 Physics II	4	_____
9.	TSC 101	3	_____

C. Math Requirements (6 or 8 semester hours)

1.	#MAT 181 Calculus w/Analytic Geometry I	4	_____
	or		
	MAT 182 Calculus w/ Analytic Geometry II	4	_____
2.	#MAT 174 Introduction to Statistics	3	_____
	or		
	MAT 244 Statistical Analysis and Design	3	_____

D. Choose One of the Following Options

1.	Biology Option--16 semester hours		
	a. BIO 242 Plant Biology	4	_____
	b. BIO 341 Entomology	4	_____
	c. BIO 342 Genetics	4	_____
	d. BIO 360 Microbiology	4	_____
2.	Chemistry Option--17 semester hours—must complete MAT181 & 182—encourage PHY262 & 262 for this option		
	a. CHE 241 Organic Chemistry I	4	_____
	b. CHE 242 Organic Chemistry II	4	_____
	c. CHE 341 Physical Chemistry I	4	_____
	d. CHE 342 Physical Chemistry II	4	_____
	e. CHE 343 Physical Chemistry Lab	1	_____
3.	Environmental Management Option --11 semester hours		
	a. ENV 342-Industrial Ecology/Sustainability	3	_____
	b. ENV380-Environmentail Certifications	2	_____

Safety Training		_____
Hazardous Mat. Transportation		_____
RCRA Haz. Waste Generator		_____
Stormwater Operator		_____
ISO 14001		_____
c. ENV441- Environmental Regulations	3	_____
d. ENV452-Hydrogeology	3	_____

Liberal Arts -- 31-33 semester hours
 General Electives -- 10-14 semester hours
 Total for Degree -- 120 semester hours

Siena Heights University has a strong Liberal Arts program with each degree program. These requirements are set forth in the Undergraduate Catalog. For further information consult the Admissions Office at 517-264-7180.