

# B.S. Environmental Science: Regenerative Organic Agriculture Requirements

The major in Environmental Science emphasizes student capacity to engage with interdisciplinary environmental challenges in both the field and laboratory. The major prepares students for graduate work or for a career in professions such as Environmental Consulting, Laboratory Analysis, Water and Wastewater Management, Geospatial Information Technology, Natural Resource Management and Remediation, and Wildlife Conservation. Students majoring in Environmental Science choose from one of the following tracks: Biology, Chemistry, Geography, Geology, and Regenerative Organic Agriculture.

*Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science: Regenerative Organic Agriculture is 2.0.*

## **Required Environmental Science Core Courses – 20 to 21 credits**

*A grade of C or better for BIOL 104 is required to be counted as a prerequisite.*

EVSC 100 Introduction to Environmental Science (3 credits)  
EVSC 210 Environmental Geology (3 credits)  
EVSC 220 Environmental Analysis (3 credits)  
EVSC 222 Environmental Biology or BIOL 244 Ecology (3/4 credits)  
EVSC 270 Applied Environmental Science (3 credits)  
GEOG 274 Introduction to Geographic Information Systems (3 credits)  
EVSC 380 Senior Seminar (2 credits)

## **Regenerative Organic Agriculture Track – 17 credits**

*A grade of C or better for BIOL 104 is required to be counted as a prerequisite.*

EVSC 201 Fundamentals of Regenerative Agriculture (1 credit)  
EVSC 202 Concepts of Food Justice (1 credit)  
EVSC 203 Concepts of Soil Science (1 credit)  
EVSC 204 Climate Change and Agriculture (1 credit)  
EVSC 205 Diseases of Field Crops (1 credit)  
EVSC 206 Agricultural Entomology (1 credit)  
EVSC 207 Soil Analysis (1 credit)  
EVSC 208 Biogeochemical Cycles (1 credit)  
EVSC 200 Regenerative Field Lab (1 credit, taken 6 times)  
EVSC 370 or 390 – Research or Internship in Agriculture during a Growing Season (3 credits)

## **Other Required Courses – 22 to 23 credits**

BIOL 104 Principles of Biology (4 credits) (*must earn a C or better*)  
BIOL 106 Introduction to Zoology (4 credits)  
BIOL 108 Introduction to Botany (4 credits)  
CHEM 204 Fundamentals of Organic Chemistry (4 credits)  
GEOG 10 Planet Earth Users Guide: Intro to Physical Geography (3 credits)  
MATH 106 Trigonometry (3 credits) or MATH 115 Precalculus (3 credits)  
or MATH 181 Calculus I (4 credits)

## **Directed General Education Courses – 12 credits**

*These courses are required for the major and satisfy the general education requirement*

*“Understanding Science and Technology.”*

CHEM 100 General Chemistry I – Category C1 (4 credits)

GEOL 100 Physical Geology – Category C2 (4 credits)

CHEM 102 General Chemistry II – Category C3 (4 credits)

## **University Electives – 14 to 16 credits**

**Program Plan Code:** BS\_EVSC\_ORGA

**Effective Date:** Fall 2024

# KU B.S. Environmental Science: Regenerative Organic Agriculture Check Sheet

Student Name:

Student ID Number:

This check sheet provides a mechanism for students and advisors to keep track of a student's progress in the program. Please refer to the program requirements for more details regarding options.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science: Regenerative Organic Agriculture is 2.0.

## Environmental Science Core Courses – 20 to 21 credits

EVSC 100 Introduction to Environmental Science	3 credits	Grade:
EVSC 210 Environmental Geology	3 credits	Grade:
EVSC 220 Environmental Analysis	3 credits	Grade:
EVSC 222 Environmental Biology or BIOL 244 Ecology	3-4 credits	Grade:
EVSC 270 Applied Environmental Science	3 credits	Grade:
GEOG 274 Introduction to Geographic Information Systems	3 credits	Grade:
EVSC 380 Senior Seminar	2 credits	Grade:
<b>Total Credits</b>	20-21 total credits	

## Regenerative Organic Agriculture Track Courses – 17 credits

EVSC 201 Fundamentals of Regenerative Agriculture	1 credit	Grade:
EVSC 202 Concepts of Food Justice	1 credit	Grade:
EVSC 203 Concepts of Soil Science	1 credit	Grade:
EVSC 204 Climate Change and Agriculture	1 credit	Grade:
EVSC 205 Diseases of Field Crops	1 credit	Grade:
EVSC 206 Agricultural Entomology	1 credit	Grade:
EVSC 207 Soil Analysis	1 credit	Grade:
EVSC 208 Biogeochemical Cycles	1 credit	Grade:
EVSC 200 Regenerative Field Lab	1 credit	Grade:
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EVSC 200 Regenerative Field Lab	1 credit	Grade:
EVSC 200 Regenerative Field Lab	1 credit	Grade:
EVSC 370 Research in Environmental Science or 390 Internship in Environmental Science	3 credits	Grade:
<b>Total Credits</b>	17 total credits	

## Other Required Courses – 22 to 23 credits

BIOL 104 Principles of Biology ( <i>must earn a C or better</i> )	4 credits	Grade:
BIOL 106 Introduction to Biology	4 credits	Grade:
BIOL 108 Introduction to Botany	4 credits	Grade:
CHEM 204 Fundamentals of Organic Chemistry	4 credits	Grade:
GEOG 10 Elements of Physical Geography	3 credits	Grade:
MATH 106 Trigonometry or MATH 115 Precalculus or MATH 181 Calculus I (4 credits)	3-4 credits	Grade:
<b>Total Credits</b>	22-23 total credits	

**Directed General Education Courses**

CHEM 100 General Chemistry I (Category C1)	4 credits	Grade:
GEOL 100 Physical Geology (Category C2)	4 credits	Grade:
CHEM 102 General Chemistry II (Category C3)	4 credits	Grade:

**University Electives – 14 to 16 credits**

Course 1:	credits	Grade:
Course 2:	credits	Grade:
Course 3:	credits	Grade:
Course 4:	credits	Grade:
Course 5:	credits	Grade:
Course 6:	credits	Grade:
<b>Total Credits</b>	14-16 total credits	

**Summary of Graduation Requirements**

Total credits from major courses	<b>59</b>
Total credits from general education program	<b>45</b>
Total credits from university electives	<b>16</b>
<b>Minimum total credits to graduate</b>	<b>120</b>
<b>Minimum overall GPA</b>	<b>2.0</b>
<b>Minimum GPA in major program</b>	<b>2.0</b>

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**Effective Date:** Fall 2024



# B.S. Environmental Science: Regenerative Organic Agriculture 8-Semester Planner

Student Name:

Student ID Number:

*Each semester listed below provides information including course categories, typical credit hours (CH.), and space to add specific course selections. This planner is a suggested path. Consult with your advisor regarding your unique plans and interests as you make choices about your schedule.*

## **First Semester Plan**

Gen Ed	FYSM 100	3 CH.	Selection: FYSM100 -
Gen Ed	GEOL 100 (Category C2)	4 CH.	Selection:
Major	MATH 106	3 CH.	Selection:
Major	EVSC 100	3 CH.	Selection:
Major	EVSC 200 (1/6)	1 CH.	Selection:
Major	EVSC 201	1 CH.	Selection:
<b>Total</b>		<b>15 CH.</b>	

## **Second Semester Plan**

Gen Ed	Category A1	3 CH.	Selection:
Gen Ed	Category B	3 CH.	Selection:
Major	GEOG 010	3 CH.	Selection:
Major	BIOL 104	4 CH.	Selection:
Major	EVSC 200 (2/6)	1 CH.	Selection:
Major	EVSC 202	1 CH.	Selection:
<b>Total</b>		<b>15 CH.</b>	

## **Third Semester Plan**

Gen Ed	Category A2	3 CH.	Selection:
Major	EVSC 270	3 CH.	Selection:
Major	GEOG 274	3 CH.	Selection:
Major	BIOL 108	4 CH.	Selection:
Major	EVSC 200 (3/6)	1 CH.	Selection:
Major	EVSC 203	1 CH.	Selection:
<b>Total</b>		<b>15 CH.</b>	

## **Fourth Semester Plan**

Gen Ed	Category A3	3 CH.	Selection:
Gen Ed	Category B	3 CH.	Selection:
Gen Ed	CHEM 100 (Category C1)	4 CH.	Selection:
Major	BIOL 106	4 CH.	Selection:
Major	EVSC 200 (4/6)	1 CH.	Selection:
Major	EVSC 204	1 CH.	Selection:
<b>Total</b>		<b>16 CH.</b>	

***Fifth Semester Plan***

Gen Ed	Category A4	3 CH.	
Elective	University Elective	3 CH.	Selection:
Gen Ed	CHEM 102 (Category C3)	4 CH.	Selection:
Major	EVSC 200 (5/6)	1 CH.	Selection:
Major	EVSC 205	1 CH.	Selection:
Major	EVSC 210	3 CH.	Selection:
<b>Total</b>		<b>15 CH.</b>	

***Sixth Semester Plan***

Gen Ed	Category B	3 CH.	Selection:
Gen Ed	Category D	3 CH.	Selection:
Major	EVSC 370 <i>or</i> EVSC 390	3 CH.	Selection:
Major	EVSC 206	1 CH.	Selection:
Major	EVSC 220	3 CH.	Selection:
Major	EVSC 222 <i>or</i> BIOL 244	3-4 CH.	Selection:
<b>Total</b>		<b>16-17 CH.</b>	

***Seventh Semester Plan***

Gen Ed	Category D	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Major	CHEM 204	4 CH.	Selection:
Major	EVSC 200 (6/6)	1 CH.	Selection:
Major	EVSC 207	1 CH.	Selection:
<b>Total</b>		<b>12 CH.</b>	

***Eighth Semester Plan***

Gen Ed	Category D	3 CH.	
Elective	University Elective	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Major	EVSC 208	1 CH.	Selection:
Major	EVSC 380	2 CH.	Selection:
<b>Total</b>		<b>15 CH.</b>	

***Additional Notes:***

1. EVSC 200 is a one credit course to be taken six (6) times.
2. Note for EVSC 300 level elective: Research or internship in Agriculture during a growing season with prior approval by Program Coordinator.
3. A grade of "C" or better for BIOL 104 is required to be counted as a prerequisite.
4. Free Electives are recommended to be used for completing 1 or 2 minors in BIOL, CHEM, GEOG, or GEOL.

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