

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN ENVIRONMENTAL SUSTAINABILITY
COLLEGE OF ATMOSPHERIC AND GEOGRAPHIC SCIENCES
 THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education:

Summer 2011 through Spring 2012

GENERAL REQUIREMENTS

Total Credit Hours	120•
Total Upper-Division Credit Hours	40
Minimum Retention/Graduation Grade Point Averages:	
Minimum in OU Coursework	2.00
Minimum in Major Coursework – Combined and OU	2.00
Overall – Combined and OU	2.00

Environmental Sustainability:
Science & Natural Resources

B410 P591

Bachelor of Science in
 Environmental Sustainability

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in four years.

GENERAL EDUCATION AND COLLEGE REQUIREMENTS
Courses graded P/NP will not apply.

Courses for fulfillment of General Education and College of Atmospheric & Geographic Sciences requirements must be from the approved General Education course list at http://www.ou.edu/enrollment/home/classes_offered/general_education.html.

University-Wide General Education (minimum 40 hours) and College of Atmospheric and Geographic Sciences Requirements
Courses graded P/NP will not apply

Core Area I: Symbolic and Oral Communication (9-22 hours, 3-6 courses)

- A. **English Composition** (6 hours, 2 courses)
 - 1. English 1113, Principles of English Composition
 - 2. English 1213, Principles of English Composition, or EXPO 1213, Expository Writing
- B. **Foreign Language** (0-10 hours in the same language)
 Students who have not completed two years of the same foreign language in high school are required to take two college courses in the same foreign language.
 - 1. Beginning Course (0-5 hours) _____
 - 2. Beginning Course, continued (0-5 hours) _____
- C. **Mathematics** (3 hours, 1 course). ***MATH 1823**, Calculus & Analytic Geometry I

Core Area II: Natural Science (7 hours, 2 courses) including one laboratory component.

- 1. **Biological Science:** ***CHEM 1315**, General Chemistry
- 2. **Physical Science:** ***PHYS 2514**, General Physics for Engr. & Science Majors

Core Area III: Social Science (6 hours, 2 courses)

- 1. Political Science 1113, American Federal Government
- 2. _____

Core Area IV: Humanities (12 hours, 4 courses)

- a. **Understanding Artistic Forms** (3 hours, 1 course) _____
- b. **Western Civilization and Culture** (6 hours, 2 courses)
 - 1. History 1483, U.S., 1492-1865, or History 1493, U.S., 1865-Present,
 - 2. _____ (excluding HIST 1483 and 1493)
- c. **Non-Western Culture** (3 hours, 1 course): _____

Core Area V: Senior Capstone Experience (3 hours, 1 course): _____

At least three hours of Upper-Division General Education coursework must be completed outside the major.

* College of Atmospheric and Geographic Sciences requirements

Additional College of Atmospheric and Geographic Sciences Bachelor of Science Requirements:

Additional College of Atmospheric and Geographic Sciences Bachelor of Science Requirements:

- 1. **MATH 2423**, Calculus & Analytic Geometry II (carries General Educ. credit)
- 2. **MATH 2433**, Calculus & Analytic Geometry III
- 3. **MATH 2443**, Calculus & Analytic Geometry IV
- 4. **PHYS 2524**, General Physics for Engr. & Science Majors
- 5. **C S 1313**, Programming for Non-Majors (fulfills Computer Literacy requirement)

MATH 1914, 2924, and 2934 will also fulfill the College's calculus requirement.

Courses required for the major or major support may not also fulfill University-Wide General Education Requirements

MAJOR REQUIREMENTS

CORE (22 hours, 7 courses)

GEOG 1203, Global Environmental Issues	3
GEOG 3233, Principles of Sustainability	3
GEOG 3443, Environment & Society	3
GEOG 3924, Analytic Methods in Geog.	4
GEOG 4453, Geographic Information Systems	3
GEOG 4543, Life Cycle Analysis	3
GEOG 4953, Proseminar in Geography (Capstone)	3

Science & Natural Resources (12 hours)

A minimum of 12 hours, to be chosen from the following courses, with no more than two courses from one department.

BOT 3453, Principles of Plant Ecology	
BOT 4623, Ecosystem Ecology	
CEES 4243, Water Technologies for Emerging Regions	
GEOG 3023, Principles of Physical Geography	
GEOG 3253, Environmental Conservation	
GEOG 3563, Geography of Natural Resources	
GEOG 3890, Selected Studies: Water & Society	
GEOG 4200, Internship in Geography	
GEOG 4283, Biogeography	
GEOG 4293, Hydrologic Science	
GEOG 4343, Climate, History & Society	
GEOG 4583, Renewable Energy Resources	
GEOG 3154, Environmental Geology	
METR 4553, Climate & Renewable Energy	
RCPL 4863, Environmental Assessment Methodologies	
SOC 3643, Population & Society	
ZOO 4423, Stream Ecology	
ZOO 4563, Biological Conservation	

_____	3
_____	3
_____	3
_____	3

MAJOR SUPPORT REQUIREMENTS

Additional College Requirements

Upper-Division Science Electives

A minimum of 15 hours of 3000-4000-level courses to be chosen from chemistry, computer science, engineering, geology, geophysics, mathematics, management information systems, meteorology, or physics; or statistics courses from botany, microbiology, political science, psychology, or sociology.

_____	3
_____	3
_____	3
_____	3
_____	3

Free Electives

Electives to bring total applicable hours to 124 including 48 upper-division hours.

_____	3
_____	3
_____	3
_____	3

INFORMATION CONCERNING GENERAL RULES, REGULATIONS AND MINIMUM REQUIREMENTS

TOTAL HOURS: A minimum of 120 semester hours acceptable toward graduation must be completed.

UPPER-DIVISION HOURS: A minimum of 48 upper-division semester hours acceptable toward graduation must be completed. OU courses numbered 3000 or above are upper-division. Transfer work is counted as lower-division or upper-division credit depending on the level at which it was offered at the institution where it was earned. Two-year college work is accepted only as lower-division credit.

SENIOR INSTITUTION HOURS: A minimum of 60 semester hours applied toward graduation must be earned at senior (4-year) institutions.

RESIDENCY:

- A minimum of two semesters must be spent in residence in the College of Atmospheric and Geographic Sciences.
- At least 36 of the last 48 hours must be completed in residence at OU.

INDIVIDUAL STUDIES: No more than six hours of independent study or directed readings may be applied toward degree requirements.

GRADE POINT AVERAGES: Students must earn a minimum overall 2.50 for each of the following: Combined Retention GPA (all college grades), OU Retention GPA, GPA for all major courses, and GPA for all major courses taken at OU.

Refer to the OU General Catalog for more complete information.

Suggested Semester Plan of Study — Bachelor of Science in Environmental Sustainability: Science & Natural Resources (B410 P591)

This plan shows one possible grouping of courses that would allow students to graduate in four years. Please refer to the front of the degree checklist for official requirements. Students must consult with College of Atmospheric and Geographic Sciences and/or Department of Geography academic advisers to verify that courses selected each semester fulfill the recommended plan and satisfy university, College of Atmospheric & Geographic Sciences, and Environmental Sustainability major requirements.

Year	FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
FRESHMAN	ENGL 1113, Principles of English Composition (Core I)	3	ENGL 1213, Principles of English Composition (Core I), or	3
	HIST 1483 or 1493, U.S. (Core IV)	3	EXPO 1213, Expository Writing (Core I)	3
	GEOG 1203, Global Environmental Issues	3	P SC 1113, American Federal Government (Core III)	3
	MATH 1823, Calculus and Analytic Geometry I (Core I)	3	MATH 2423, Calculus and Analytic Geometry II	3
	Elective	3	CHEM 1315, General Chemistry (Core II)	5
			Elective	1
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15
SOPHOMORE	MATH 2433, Calculus and Analytic Geometry III	3	MATH 2443, Calculus and Analytic Geometry IV	3
	C S 1313, Programming for Non-Majors	3	PHYS 2524, General Physics for Engr. & Science Majors	4
	PHYS 2514, General Physics for Engr. & Science Majors (Core II)	4	GEOG 3924, Analytic Methods in Geography	4
	¹ General Education Social Science (Core III)	3	¹ General Education Understanding Artistic Forms (Core IV)	3
	Elective	2	Elective	1
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15
JUNIOR	GEOG 3233, Principles of Sustainability	3	GEOG 3443, Environment and Society	3
	² Science & Natural Resources Concentration Elective	3	² Science & Natural Resources Concentration Elective	3
	³ Science Elective	3	³ Science Elective	3
	¹ General Education Western Civ. & Culture (Core IV)	3	³ Science Elective	3
	Elective	3	Elective	3
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15
SENIOR	GEOG 4453, Geographic Information Systems	3	GEOG 4953, Proseminar in Geography (Capstone)	3
	GEOG 4543, Life Cycle Analysis	3	² Science & Natural Resources Concentration Elective	3
	² Science & Natural Resources Concentration Elective	3	³ Science Elective	3
	³ Science Elective	3	Elective	3
	¹ General Education Non-Western Culture (Core IV)	3	Elective	3
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15

¹ = To be chosen from the University-Wide General Education Approved Course List. Three hours of general education must be upper-division outside the major.

² = A minimum of 12 hours, to be chosen from the following **concentration**, with no more than two courses from one department:

Science and Natural Resources: BOT 3453, 4623; CEES 4243; GEOG 3023, 3253, 3563, 3890 (Water and Society), 4200, 4283, 4293, 4343, 4583; GEOL 3154; METR 4553; RCPL 4863; SOC 3643; ZOO 4423, 4563.

³ = A minimum of 15 hours of 3000-4000 -level courses to be chosen from chemistry, computer science, engineering, geology, geophysics, mathematics, management information systems, meteorology, or physics; or statistics courses from botany, microbiology, political science, psychology, or sociology.

⁴ = This course fulfills the Computer Literacy Requirement for graduation as required by the Oklahoma State Regents for Higher Education.

Bachelor's degrees require a minimum of 48 hours of upper-division (3000-4000) coursework.

This plan of study should not be used in lieu of academic advisement.

Upper-Division Science Electives (15 hours)

A minimum of 15 hours of 3000-4000 -level courses to be chosen from chemistry, computer science, engineering, geology, geophysics, mathematics, management information systems, meteorology, or physics; or statistics courses from botany, microbiology, political science, psychology, or sociology.
