Required Curriculum for a B.S. in Environmental Science With a Concentration in Earth Science

First Semester WR13100 ⁺ Composition/University Seminar MATH 10350* Calculus I CHEM 10171* General Chemistry I + Lab BIOS 10161 Introduction to Biology I	<u>Cr.</u> 3 4 4 4	Second Semester University Requirement/University seminar MATH 10360* Calculus II CHEM 10172* Organic Chemistry I + Lab BIOS 10162 Introduction to Biology II		<u>Cr.</u> 3 4 4 4
Physical Education/Life Skills or ROTC	<u>1</u> 16	Physical Education/Life Skills or ROTC		<u>1</u> 16
Third Semester CE 20110 Planet Earth + Lab BIOS 30312 Ecology + Lab (BIOS 31312) Language I SC40491 Topics in Environmental Science University Requirement Course	<u>Cr</u> 4 4 3 3 3 17	Fourth Semester CE 20300 Global Change, Water & Energy CE 20320 Environmental Aquatic Chemistry Chemistry Elective (e.g. 20273 + lab) Language II University Requirement Course ⁺		Cr 3 3 4 3 3 16
Fifth Semester CE 20520 Environmental Mineralogy CE 30500 Geomorphology Physics I + Lab CE 45300 Fall Field Trip Language III	Cr. 3 3 4 1 3 14	Sixth Semester CE 30540 Petrology of Earth Materials + Lab (CE31540) University Requirement Course [†] CE 30530 Sedimentology and Stratigraphy Physics II + Lab CE 45200 Spring Field Trip		<u>Cr.</u> 4 3 4 1 15
Seventh Semester CE 40381 Environmental Isotope Geochem. CE 40300 Geochemistry General Elective University Requirement Course University Requirement Course **The course is the cou	Cr 3 3 3 3 3 15	Eighth Semester CE 30560 Dynamic Earth BIOS 40411 Biostatistics + tutorial General Elective CE 40350 Environmental Microbiology University Requirement Course +	3	<u>Cr.</u> 3 4 3 33

REQUIRED CREDITS: 124

University Requirement course credits = 24

Language credits = 9

Non-Earth Science Required Course credits = 47

Earth Science required course credits = 38

Free Electives = 4

Phys. Ed = 2

⁺University requirements include: 2 PHIL courses, 2 THEO courses, 1 HIST course, 1 course in the Social Sciences (ANTH, ECON, POLS, PSY, or SOC), and 1 Fine Arts or Literature course. Note that one of the PHIL or THEO courses must count as a relevant course in Ethics.

^{*} Or higher level equivalent

^{**}The curriculum requires proficiency through Intermediate Level in a language.

^{***} The Social Science Requirement must be fulfilled by taking ECON 10010 or 20010 (Principles of Microeconomics)

Note: CE30500 Geomorphology and CE40381 Environmental Isotope Geochemistry are offered every OTHER year in Fall semester, so their order can be switched. Similarly, CE30530 Sedimentation and Stratigraphy and CE30560 Dynamic Earth are offered every OTHER year in Spring semester.

Course Distribution:

- 1) University Requirement Courses: 8 courses/24 credits, including: 2 PHIL courses, 2 THEO courses, 1 HIST course, 1 course in the Social Sciences (ANTH, ECON, POLS, PSY, or SOC), 1 Fine Arts or Literature course, and Composition/University Seminar.
- 2) Language credits: 3 courses/9 credits but placement and AP credit can decrease this total.
- 3) Non-Earth Science required courses: 12 courses/47 credits

1st Semester:

MATH 10350* Calculus I

CHEM 10171* General Chemistry I + Lab

BIOS 10161 Introduction to Biology I

2nd Semester:

MATH 10360* Calculus II

CHEM 10172* Organic Chemistry I + Lab

BIOS 10162 Introduction to Biology II

3rd Semester:

BIOS 30312 Ecology + Lab (BIOS 31312)

SC40491 Topics in Environmental Science

4th Semester:

BIOS 40411 Biostatistics + tutorial

Chemistry Elective (e.g. 20273 + lab)

5th Semester:

Physics I + Lab

6th Semester:

Physics II + Lab

- 4) Earth Science required courses: 13 courses/38 credits
- CE 20110 Planet Earth + Lab
- CE 20300 Global Change, Water & Energy
- CE 20520 Environmental Mineralogy
- CE 30530 Sedimentology and Stratigraphy
- CE 45300 Fall Field Trip
- CE 30500 Geomorphology
- CE 30540 Petrology of Earth Materials + Lab (CE31540)
- CE 40350 Environmental Microbiology
- CE 45200 Spring Field Trip
- CE 40381 Environmental Isotope Geochemistry
- CE 40300 Geochemistry
- CE 30560 Dynamic Earth
- CE 20320 Environmental Aquatic Chemistry