ENVIRONMENTAL SCIENCE

College of Science and Health Bachelor of Science; **ENVIRONMENTAL SCIENCE**

Incoming students Fall 2011 (UCC)

UCC REQUIREMENTS [40-41 credits]

AREA 1: PERSONAL WELLBEING [3]

_____ 3 cred.

AREA 2: EXPRESSION [9]

a. Arts/Communication

COMM 1100 Communication in Action 3 cred.

b. Writing

ENG 1100 College Writing 3 cred.

c. Literature

_____ 3 cred.

AREA 3: WAYS OF KNOWING [19-20]

a. Philosophical Perspectives

_____ 3 cred.

b. Historical Perspectives

_____ 3 cred.

c. Social/Behavioral Science (2 different disciplines)

_____ 3 cred.

_____ 3 cred.

d. Scientific Perspectives (choose 1 of the following)

Bio 1630 or Chem 1600 or Physics 2600 4 cred.

e. Quantitative Thinking

MATH 1600 Calculus I 3 cred.

AREA 4: DIVERSITY & JUSTICE [3]

- ***Must complete 18 credits in UCC prior to taking Area 4***

_____ 3 cred.

AREA 5: CIVIC & COMMUNITY ENGAGEMENT [3]

- ***MUST COMPLETE Area 4 before taking Areas 5&6***

_____ 3cred.

AREA 6: GLOBAL AWARENESS [3]

- ***MUST COMPLETE Area 4 before taking Areas 5&6***

ENV 3160 Global Climate Change 3cred.

FIRST YEAR SEMINAR [1.5]

- ***Required for 1st year students & transfers with less than 12 credits***

_____ 1.5 cred.

INTENSIVE REQUIREMENTS

These courses can be double counted within the UCC, the major, or as free electives. If you are a transfer with an AA/AS degree you must take one WI course and zero TI courses.

WRITING INTENSIVE (WI) *W

- ***The first WI course must be Area 2 College Writing***
- ***At least one course must be at the 300 or above level***

ENG 1100 College Writing 3 cred.

_____ 3 cred.

_____ 3 cred.

_____ 3 cred.

TECHNOLOGY INTENSIVE (TI) *T

ENV 3160 Global Climate Change 3 cred.

_____ 3 cred.

UNIVERSITY REQUIREMENTS

FOREIGN LANGUAGE [6]

_____ 3 cred.

_____ 3 cred.

CORE COURSES [18 cred.]

- ENV 1100 Environmental Sustainability***(meets Area 3)***
- ENV 1150 General Geology
- ENV 3010 Field Experience
- ENV 3750 Soils in the Environment
- ENV 0700 Soil and Water Analysis
- ENV 3800 Junior Seminar
- ENV 4800 Senior Practicum

MAJOR CO-REQUIREMENTS [36 cred.]

- BIO 1630/1640 General Biology I & II
- CHEM 1600/1610 General Chemistry I &II
- MATH 1600/ 1610 Calculus I &II **or**
- MATH 1600/2300 Calculus I and Statistics
- PHYS 2600/2610 General Physics I & II **or**
- PHYS 2550/2560 College Physics I & II
- BIO 3400 General Ecology
- ***MAJOR SCIENCE ELECTIVES [9 cred.]***
- CHEM 2510 Organic Chemistry I
- CHEM 2520 Organic Chemistry II
- CHEM 3220 Environmental Chemistry
- ENV 2160 Oceanography
- ENV 2200 Earth Through Time
- ENV 2500 Meteorology
- ENV 3160 Global Climate Change*T* ***(meets Area 6)***
- ENV 3200 Geochemistry
- ENV 3270 Geomorphology
- ENV 3890 Environmental factors in Land Use
- ENV 4230 Pollution, Hazards, Impact & Risk
- ENV 4500 Environmental Computer Applications
- ENV 4700 Hydrogeology
- ENV 3990 Selected Topics
- BIO 4020 Aquatic Ecology
- BIO 2610 General Botony
- BIO 3180 Invertebrate Zoology (by advisement)
- BIO 3990 Selected Topics
- GEO 4030 Geographic Information Systems

MAJOR ENVIRONMENTAL POLICY ELECTIVES [3 cred.]

- ENV 3400 Environmental Law
- ECON 2300 Economics of the Environment
- HUMH 2010 Humanities Honors – Seminar III
- POL 3550 Politics of the Environment
- SOC 4060 Social and Environmental Change

HIGHLY RECOMMENDED:

- CS 1300 Introduction to Computers/BASIC **or**
- CS 2010 Computer Lit; Micro Applications
- ECON 2010 Macroeconomic Principles
- ECON 2020 Microeconomic Principles
- ENG 3000 Technical Writing **or**
- ENG 3300 Critical Writing*W
- PHIL 3350 Environmental Ethics

SUGGESTED SEQUENCE OF COURSES

1st semester		Credits	**2nd semester**		Credits
ENV 1100	Environmental Sustainability *(meets Area 3d)*	4	ENV 1150	General Geology	4
BIO 1630	General Biology I	4	BIO 1640	General Biology II	4
ENG 1100	College Writing *(meets Area 2b)*	3	MATH 1600	Calculus I *(meets Area 3e)* **may need pre-requisite courses**	4
----------	Area 1, 2, or 3 course	3	COMM 1100	Comm. In Action *(meets Area 2a)*	3
WPU 1010	First-Year Seminar	1.5			
	Credits	15.5		Credits	15
3rd semester			**4th semester**		
CHEM 1600	General Chemistry I (lecture & lab)	4	CHEM 1610	General Chemistry II (lecture & lab)	4
PHYS 2600 or PHYS 2550	General Physics I **or** College Physics I	4	PHYS 2610 or PHYS 2560	General Physics II **or** College Physics II	4
MATH 1610 or MATH 2300	Calculus II **or** Statistics	4	----------	Area 1, 2, or 3 course	3
----------	Area 1, 2, or 3 course	3	----------	Area 1, 2, or 3 course	3
	Credits	15		Credits	14
5th semester (Junior year)			**6th semester (Junior year)**		
BIO 3400	General Ecology	4	ENV 3800	Junior Seminar	3
ENV 3750	Soils in the Environment	3	ENV 3010	Field Experience	3
----------	Area 1, 2, or 3 course	3	ENV 0700	Soil & Water Analysis	2
----------	Area 1, 2, or 3 course	3	ENV	ENV. SCIENCE ELECTIVE	3-4
----------	Foreign Language I	3	----------	Foreign Language II	3
			----------	Area 4 course	3
	Credits	16		Credits	17-18
7th semester (Senior year)			**8th semester (Senior year)**		
ENV 4800	Senior Practicum	3	ENV 3160	Global Climate Change *(meets area 6 & TI)*	3
ENV	ENV. SCI. POLICY ELECTIVE	3	----------	Free Elect., TI, WI, or recommended course	3
ENV	ENV. SCIENCE ELECTIVE	3-4	----------	Free Elect., TI, WI, or recommended course	3
----------	Area 5 Course	3	----------	Free Elect., TI, WI, or recommended course	3
----------	Free Elect., TI, WI, or recommended course	3	----------	Free Elect., TI, WI, or recommended course	3
	Credits	15-16		Credits	15

ADDITIONAL RECOMMENDATIONS

- Students interested in a four-year course of study may also elect to take several courses during the Pre-Session and Summer Sessions to reduce the load during regular fall and spring semesters.
- The University Core Curriculum requires that students take 4 Writing Intensive and 2 Technology Intensive Courses. Environmental Science majors should, if possible, take courses within the major or co-requirements that are designated as either Writing or Technology Intensive.

03/31/11