

Environmental Science B.S. Degree Requirements, Fall 2013-Spring 2014

Department of Geology and Physics -- University of Southern Indiana

For more information on this program, please contact Dr. William Elliott at welliott@usi.edu

Course Number	Course Name	Credits
University Core Curriculum at University of Southern Indiana		
A1 Composition/Speech (9 hours)		
ENG 101	Rhetoric & Composition I	3
ENG 201	Rhetoric & Composition II	3
CMST 101	Intro to Public Speaking	3
A2 Mathematics (3-4 hours)		
MATH 230	Calculus I (+ES requirement)	4
B1 Ethics (3 hours)		
PHIL 201	Introduction to Ethics	3
B2 The Arts (3 hours)		
ART 201	Introduction to Visual Arts	3
B3 Health/Fitness (2 hours)		
KIN 186 & Activity	Wellness/Fitness Appraisal & 100-level activity class	2
C1 History (3 hours)		
HIST 101	United States History to 1865	3
C2 Individual Development/Social Behavior (6 hours)		
PSY 201	Intro to Psychology	3
SOC 121	Principles of Sociology	3
C3 Science (8-9 hours)		
GEOL 151 or GEOL 161	Geology of National Parks or Introduction to Geology (+ES requirement)	4
BIOL 141	Principles of Biology (+ES requirement)	4
C4 Western Culture (6 hours)		
HUM 211	Humanities I	3
HUM 212	Humanities II	3
C5 Global Communities (3 hours)		
GEOG 330	World Geography	3
D1 Synthesis (3 hours)		
GEOL 481	Advanced Environmental Geology (+ES requirement)	4
TOTAL CORE		51
Environmental Science Core Courses (C or better)		
GEOG 112 or GEOL 131	Earth System Science or Geology, Environment or Society	3
BIOL 215	Ecology	3
GEOL 311	Concepts in Environmental Science	3
GEOL 481	Advanced Environmental Geology (+satisfies core)	4
TOTAL ES Core Courses (remove credits for GEOL 481)		9
Environmental Science Required Coursework		
GEOL 151 or GEOL 161	Geology of National Parks or Introduction to Geology (+satisfies core)	4
GEOL 234	Oceans Present, Past & Future (Oceanography)	3
GEOG 215	Climatology	3
CHEM 321	Quantitative Analysis	4
GEOL 407	Geomorphology	4

GEOL 441	Hydrogeology	4
BIOL 452	Biology & Environmental Science of Global Change	3
Choose at least 9 credit hours from the following:		
ECON 338	Environmental & Resource Economics	3
POLS 464	Environmental Politics and Policy	3
PHIL 366	Environmental Ethics	3
SOC 415	Sociology of the Environment	3
Choose at least 9 credit hours from the following:		
BIOL 221	Introduction to Entomology	4
BIOL 305	Aquatic Biology	4
BIOL 306	Ichthyology	4
BIOL 321	Invertebrate Zoology	4
BIOL 336	Plant Physiology	4
BIOL 361	Plant Systematics	4
BIOL 459	Advanced Ecology	4
CHEM 241	Organic/Biochemistry Principles or	4
CHEM 354	Organic Chemistry II	4
CHEM 341	Environmental Chemistry	3
GEOL 411	Geology of Soils	4
GEOL 455	Global Quaternary Env. & Geologic Change	3
GEOL 465	Introduction to GIS	3
GEOL 475	Remote Sensing and Image Analysis	3
GEOL/CHEM 499; BIOL 492	Independent Research (Max of 4 credits counting toward ES degree)	4
ENGR 265	Energy Systems & Sustainable Design	3
ENGR 428	Environmental Engineering*	4
ENGR 429	Water Resources*	4
TOTAL ES Required Courses (remove credits for GEOL 151 or 161)		39
Supporting Science Courses & Prerequisites		
BIOL 141	Principles of Biology (+satisfies core)	4
BIOL 151	Botany	3
BIOL 152	Zoology	3
CHEM 261	General Chemistry I	4
CHEM 262	General Chemistry II	4
PHYS175	General Physics I	4
MATH 230	Calculus I (+satisfies core)	4
TOTAL Supporting Sciences (remove credits for BIOL 141 & MATH 230)		18
Supporting Social Science Courses		
Choose one course from the following:		
SOC 370	Seminar: w/ Variable Topics	3
SOC 370	Seminar: Global Climate Change	3
PHIL 435	Philosophy of Science	3
TOTAL Supporting Social Science Courses		3
TOTAL FOR B.S. in ENVIRONMENTAL SCIENCE		120
TOTAL CREDIT HOURS FOR GRADUATION		120
AT LEAST 39 CREDIT HOURS 300/400 LEVEL REQUIRED FOR GRADUATION		40