

Plant and Environmental Sciences – Soil and Water Science Concentration 2014-15

Freshman Year

First Semester			Second Semester		
BIOL 1030	General Biology ¹	3	BIOL 1040	General Biology II ¹	3
BIOL 1050	General Biology Lab. I ¹	1	BIOL 1060	General Biology Lab II ¹	1
CH 1010	General Chemistry	4	CH 1020	General Chemistry	4
MATH 1020	Intro. To Math. Analysis or	3	ENGL 1030	Accelerated Composition	3
MATH 1060	Calculus of One Variable I	4	STAT 2300	Statistical Methods I	3
PES 1040	Introduction to Plant Science	3	Arts and Humanities (Non-Lit.) Requirement ²		3
Semester Hours: 14-15			Semester Hours: 17		

¹BIOL 1100 may substitute for BIOL 1030/1050 and BIOL 1110 may substitute for BIOL 1040/1060; BIOL 1100 and 1110 are recommended for students in the Agricultural Biotechnology Concentration.

²See General Education Requirements. PHIL 1030 is recommended for students in the Agricultural Biotechnology Concentration.

Sophomore Year

First Semester			Second Semester		
CH 2010	Survey of Organic Chemistry	3	APEC 2050	Agriculture and Society	3
CH 2020	Survey of Organic Chemistry Lab.	1	COMM 1500	Intro. To Human Comm. or	3
GEOL 1010	Physical Geology	3	COMM 2500	Public Speaking	3
GEOL 1030	Physical Geology Lab.	1	MICR 3050	General Microbiology	4
PES 2020	Soils	4	PHYS 2080	General Physics II	3
PHYS 2070	General Physics I	3	PHYS 2100	General Physics II Lab.	1
PHYS 2090	General Physics I Lab.	1			
Semester Hours: 16			Semester Hours: 14		

Junior Year

First Semester			Second Semester		
AGM 3010	Soil and Water Conservation	3	BIOL 4010	Plant Physiology and	3
PES 4220	Major World Crops	3	BIOL 4020	Plant Physiology Lab.	1
Concentration Requirement ¹		9	ENGL 3150	Scientific Writing and Comm.	3
			GEOL (CE) 4820	Groundwater and Contaminant Transport	3
			PES (ENSP) 3150	Environment and Agric.	3
			PES 4010	Academic and Professional Dev.	1
			Social Science Requirement ²		3
Semester Hours: 15			Semester Hours: 17		

Senior Year

First Semester			Second Semester		
PES 3500	Practicum	3	PES (BE) 4080	Land Treatment of Wastewater and Sludges	3
PES 4030	Soil Genesis and Classification	2	PES 4900	Beneficial Soil Organisms in Plant Growth	3
PES 4550	Seminar	1	Concentration Requirement ¹		6
Applied Spatial Technology Requirement ³		3	Social Science Requirement ²		3
Arts and Humanities (Literature) Requirement ²		3			
Field Scale Environmental Mgt. Requirement ⁴		3			
Semester Hours: 15			Semester Hours: 15		

Total – 123-124 Total Semester Hours

¹ Select from a department-approved list. Courses to support proficiency in a foreign language also are encouraged.

² See General Education Requirements.

³AGM 4100, FOR 4330, GEOL 4210, or other course approved by advisor.

⁴AGM 4020, GEOL 4090, or other course approved by advisor.