

ARIZONA STATE UNIVERSITY - MAIN
 BACHELOR OF INTERDISCIPLINARY STUDIES (BIS)
 DIVISION OF UNDERGRADUATE ACADEMIC SERVICES
 AREA OF CONCENTRATION VERIFICATION FORM
ENVIRONMENTAL SCIENCE: PLANT BIOLOGY/GEOGRAPHY
 School of Geographical Sciences, (480) 965-7533
 COLLEGE OF LIBERAL ARTS & SCIENCES

Course Campus Prefix & Number	Course Title	Lower Division	Upper Division	Sem./Year Taken
	<i>Plant Biology (20 credits)</i>			
M PLB 200/201 (3,1)	Biology of Plants and Laboratory			
M PLB 322 (3) or M BIO 320 (3)	Environmental Science Fundamentals of Ecology			
M PLB 306 (4) or M PLB 308 (4) or M PLB 310 (4)	Plant Anatomy Plant Physiology The Flora of Arizona			
M PLB 420 (3) or M PLB 421 (3)	Plant Ecology: Organisms and Populations Plant Ecology: Communities and Ecosystems			
	<i>Electives - 6 hrs. (See back page for course list)</i>			
M PLB				
M PLB				
	<i>Geography (19 credits)</i>			
M GPH 111 (4)	Intro to Physical Geography & Lab			
M GPH 210 (3) or M GPH 211 (3) or M GPH 212/214 (4)	Society and Environment Landform Processes Intro to Meteorology & Lab			
M GCU 364 (3) or M GCU 474 (3)	Energy in the Global Arena Public Land Policy			
M GPH 371 (3) or M GPH 373 (3)	Introduction to Cartography & Georepresentation Geographic Information Science I			
	<i>Electives - 6 hrs. (See back page for course list)</i>			
M GPH				
M GPH				
Total Hours Required		39		
<p>"C" minimum grade required for all classes in the Environmental Sciences concentration. Students must complete a minimum of 12 upper division hours in each of the two areas, Plant Biology and Geography.</p>				

Bachelor of Interdisciplinary Studies
Environmental Science: Plant Biology/Geography

This Environmental Science BIS double concentration combines two different perspectives on the study of the environment. In Plant Biology, students learn about the structure and function of plants and plant communities, the significant role of plants in the world's ecosystems, the interactions of human populations, climate change, and plants, and the conservation of biological diversity. In Geography, students learn about the environmental characteristics of places through understanding their physical geography, the interaction of society and environment, environmental policy, and how to display this knowledge through visualization and analysis of spatial information.

This BIS degree in Environmental Science prepares students for a variety of private and public sector careers. Examples include:

- * air quality analyst
- * endangered species botanist
- * environmental consultant
- * environmental educator
- * natural resource manager
- * restoration ecologist
- * public land policy administrator
- * water quality analyst

To further your knowledge of the environmental sciences and increase your competitiveness in today's job market, you may wish to seek additional courses in chemistry, conservation biology, geology, or other sciences; statistics, data analysis, and computers; or law. Your advisor can assist you in these matters.

Plant Biology - Select 6 credit hours from the following list of electives:

- PLB 304 (3) Biology of Algae and Fungi
- PLB 305 (3) Desert Annuals and Cacti
- PLB 394 (3) ST: Perspectives in Environmental Science
- PLB 400 (3) Lichenology
- PLB 411 (3) Trees and Shrubs of Arizona
- PLB 432 (3) Computer Applications in Biology (CS)
- PLB 434 (3) Landscape Ecological Analysis & Modeling
- PLB 484 (3) Internship (may be suitable for BIS 401, with prior approval)
- PLB 498 (3) Ecosystem Management
- PLB 498 (3) Riparian Restoration Ecology
- PLB 498 (3) Plants and Environmental Stress
- PLB 499 (3) Individualized Instruction (may be suitable for BIS 401, with prior approval)

Geography - Select 6 credit hours from the following list of electives:

- GPH 314 (3) Global Change
- GPH 381 (3) Geography of Natural Resources
- GPH 405 (3) Energy and Environment
- GPH 414 (3) Climate Change
- GPH 418 (3) Landforms of the Western United States
- GPH 422 (3) Plant Geography (also listed as PLB 422)
- GPH 433 (3) Alpine and Arctic Environments
- GPH 481 (3) Environmental Geography