

ENVIRONMENTAL SCIENCE (BS)

The agencies and organizations where students with degrees in environmental science are obtaining jobs vary greatly. To date, SBC has placed students locally at the Standing Rock Sioux Tribe Environmental Protection Agency, the Cheyenne River Tribe Game and Fish Department, Sitting Bull College, the Standing Rock Sioux Tribe Department of Environmental Regulation, the U.S. Game and Fish Department, MRI Water, and with private farms and ranches.

In addition, to the ample areas of employment available to SBC's environmental science graduates, there are many opportunities available to students pursuing work experiences through internships. SBC environmental science students have conducted work experience internships with the following agencies and organizations: the Natural Resource and Conservation Service, Sioux County Extension, National Aeronautical and Space Administration (NASA), the University of Minnesota, Iowa State University, the United States Forest Service, Sitting Bull College, the Standing Rock Sioux Tribe Environmental Protection Agency, the Standing Rock Sioux Tribe Game and Fish Department, Oahe Veterinary Hospital, and the Experimental Program to Stimulate Cooperative Research (EPSCoR). Many of these entities have expressed a genuine need exists in finding qualified personnel that have a Bachelor of Science degree in environmental science or a natural resources-related field. Advancement in careers is also contingent on obtaining a degree at the B.S. level or higher for nearly all federal and state agencies, as well as with many tribal organizations. The B.S. degree in environmental science from Sitting Bull College will provide SBC graduates with a degree that will allow them to compete for jobs and receive career advancement, while obtaining their B.S. degree in environmental science locally.

Graduates from SBC's environmental science program will provide essential support for managing local natural resources. Standing Rock Sioux Tribal agencies have expressed an interest in hiring SBC's graduates and those applicants who have showed a dedication to management and an appreciation of field work experience.

Requirements

Successful completion of an Associate of Science degree in Environmental Science is required for admission. Requirements for graduation are as follows:

1. Completion of all course work in the curriculum.
2. A minimum of a 2.0 cumulative grade point average.
3. A minimum of 40 credit hours of 300 and 400 level course work.
4. Completion of research project.

Environmental Science Course-Transfer Policy

The following policy will guide the transferability of 100- and 200-level courses from other institutions which are similar to specific required courses within the Professional Core Requirements of the B.S. Environmental Science degree plan. **Although certain courses may be substituted with proper documentation, students will need to take additional 300+ electives in order to fulfill the 46-credit (300+) core requirements.**

- 100-200 level courses may be accepted in place of taking a redundant upper-division course with a similar title, if the course contains more

than 75% of similar material from an accredited program and the student completed the course with a "C" (2.0) or better.

- The transfer of a 100-200 level Introduction to GIS/GPS course will include the above requirements and the additional requirement of passing the *Sitting Bull College GIS Basic Skills Examination* by answering more than 80% of the questions correctly.

The student will describe and show competency in the following issues associated with environmental science:

1. The proper use of environmental sampling equipment and current technology in the classroom and in the field according to accepted "Standard Methods";
2. The ability to design and conduct a field or laboratory study using appropriate sampling equipment and techniques according to accepted "Standard Methods";
3. The ability to describe the similarities and differences between traditional and modern views of the Earth;
4. The ability to describe biological, chemical, and physical influences on environmental media, including human health effects;
5. The ability to describe transport mechanisms for contaminants as they travel through various environmental media;
6. The ability to develop a professional research proposal and demonstrate the various steps of the scientific method in the design;
7. The ability to develop and present a professional research presentation and answer questions in an appropriate manner;
8. The ability to produce a final report of a research project that effectively provides a general narrative of the student's research;
9. The skill to integrate GPS/GIS technology into presentations; and
10. The competency of developing a wildlife conservation and management plan applicable to the needs of the Standing Rock Sioux Reservation and/or the Cheyenne River Sioux Reservation.

Code	Title	Hours
General Education Requirements		
ENGL 110	Composition I	3
ENGL 120	Composition II	3
COMM 110	Fundamentals of Public Speaking	3
MATH 103	College Algebra	4
PSYC 100	First Year Learning Experience	3
SOC 120	Transitions-Graduation & Beyond	2
NAS 101	Ochethi Sakowin Language for Beginners	3
or NAS 103	Introduction to Ochethi Sakowin Language, Culture & History	
<i>Native American Studies Elective</i>		
Select one course from Native American Studies		3
CSCI 101	Introduction to Computers	3
<i>Humanities or Social & Behavioral Science</i>		
Select one course from:		3
Arts, English, History, Humanities, Music, Native American Studies, Philosophy, Anthropology, Criminal Justice, Economics, Geography, Human Services, Political Science, Psychology, and Sociology		
<i>Health/Physical Education</i>		
Select two one-hour courses or any one two-hour course		2
BIOL 150	General Biology I	4
CHEM 115	Introduction to Chemistry	4
or CHEM 121	General Chemistry I	

Environmental Science Core Requirements

BIOL 224	General Ecology	4
ENS 113	Introduction to Environmental Science	4
ENS 202	Environmental Issues	2
ENS 225	Environmental Sampling	4
ENS 240	Environmental Statistics	3
ENS 260	Environmental Research Project I	2
ENS 261	Environmental Research Project II	2
ENS 297	Environmental Science Internship	3
CHEM 116	Introduction to Organic & Biochemistry	4
SOIL 210	Introduction to Soil Science	4
ARSC 236	Introduction to Range Management	3
STEM Electives 100+ Level		4-5

Professional Core Requirements

CHEM 403	Analytical Chemistry	3
ENS 301	Hydrology	3
ENS 311	Introduction to GIS/GPS	3
ENS 321	Environmental Chemistry	3
ENS 331	Wildlife Conservation	4
ENS 422	Environmental Toxicology	3
ENS 432	Aquatic Ecosystems	3
ENS 452	Science Literature	3
ENS 453	Environmental Law & Policy	3
ENS 493	Senior Research	3
MATH 314	Applied Statistics	3
SOIL 431	Soil Conservation Management	3
Electives 300+ Level		9

Total Hours **125-126**