COMPOSITE IN SCIENCE TEACHING¹

This composite major is designed to provide undergraduates with exemplary preparation for careers as middle and high school science teachers. Students with aptitude and interest in science are strongly encouraged to consider a career in teaching. Science teachers enjoy outstanding employment prospects, and the teaching of these disciplines is intrinsically rewarding, challenging, and noble.

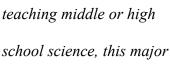
Middle and high school teachers who are certified to teach science are in high demand throughout South Dakota and across the country. A national commission recently noted that "the demand for certified and fully qualified math and science teachers is far outpacing supply" and projected that 170,000 new middle and high school math and science teachers will be needed over next 10 years.¹ This composite major in science teaching offers flexibility in combining two areas of science. Completion of the program will lead to a BSED degree from BHSU and South Dakota certification for middle and secondary school in at least two disciplines.² Teachers certified to teach <u>two</u> areas of science are particularly valuable, especially in smaller schools and rural regions.

Fundamental to this major is a new 32-credit education block designed to prepare teachers of grades 7-12. This block is scheduled to be offered for the first time in 2004-2005 and is intended to serve as the student's final year. The block is highly intensive and incompatible with the taking of additional courses on campus. Therefore, prior to enrolling, a student is expected to have already completed all non-education course requirements for the major. In addition, students are expected to have participated in at least 36 contact hours through the Distinguished Scholars Program in Math and Science Education and have successfully completed both EDFN 395 (Pre-Admission Teaching Practicum), EDFN 338 (Foundations of American Education), and EPSY 302 (Educational Psychology). If any of the last four requirements has not been met prior to the final year, a student is encouraged to contact a program representative about possible accommodation.

In addition to the above requirements, admission to the education block requires students to have completed a minimum of 63 semester hours with a grade point average of 2.60 or higher. Students must also pass the Preprofessional Skills Test (PPST) or submit acceptable scores on the Regents' Rising Junior (CAAP) examination.

¹National Commission on Mathematics and Science Teaching for the 21st Century Report, p. 21, 2000.

²Teacher certification is pending final approval by the South Dakota Board of Education.



If you are interested in

affords an excellent

opportunity. High quality

science teachers are in

tremendous demand

throughout the region and

across the country.



DEGREE REQUIREMENTS

To obtain a Composite Major in Science Teaching at BHSU, students must complete the following course requirements.

General Requirements Prior to Final Year

MATH	123/L	Calculus I (prereq: MATH 115 or equivalent or by placement)
ENGL	101, 201	Composition I & II 6
SPCM	101	Speech 3
HLTH	100/101	Wellness for Life
PSYC	101	General Psychology 3
		Social Sciences Electives
		Humanities & Arts Electives 12
EDFN	395	Pre-Admission Teaching Practicum (typically as sophomore) 1
EDFN	338	Foundations of American Education 2
EPSY	302	Educational Psychology (typically as junior)
		Total 43

Science (select two of the following areas of focus)

Biology

ыладу		
BIOL 150	Principles of General Biology	2
BIOL 151/153/L	General Biology	6
BIOL 331/L	Microbiology	5
MATH 281	Introduction to Statistics	3
BIOL 371/L	Genetics	3
BIOL 411/L	Ecology	4
BIOL 300+	Biology Elective	3
CHEM 112/114/L	General Chemistry	<u>8</u> 34
Chemistry		
CHEM 112/114/L	General Chemistry	8
CHEM 326/328/L	Organic Chemistry 1	
CHEM 232/L	Analytical Chemistry I	
	Total	
Earth Science		
PHYS 185/L	Astronomy	3
BIOL 150/151/153/L	General Biology	
GEOL 201/L	Physical Geology	
GEOL 203/L	Historical Geology	4
GEOL 321	Cons. of Natural Resources	
Select 2 of the following:		
GEOL 340	Minerology/Petrology (pre: CHEM 112/L)	4
GEOL 350	Environmental Geology	
GEOL 360	Environmental Geochemistry (pre: CHEM 114/L)	
GEOL 370	Hydrology (pre: PHYS 211/L)	3
SCI 388	Global Position. & Geog. Info. Syst. (pre: CIS 105)	3
	Total	
Physics		
PHYS 211/213/L	University Physics 1 & 2	10
PHYS 185/L	Astronomy	
PHYS 325	Modern Physics	
PHYS 431	Quantum Mechanics	<u>3</u>
	Total	19
Final Year Education	Block	32

Course of study subject to change.

This course of study is designed

to prepare high quality

teachers of science who have

deep content backgrounds as

well expertise in how to foster

learning.

Enrollment Information

For additional information, please contact:

Black Hills State University Dr. Ben Sayler, Director Center for the Advancement of Mathematics and Science Education 1200 University, Unit 9005 Spearfish, SD (605) 642-6873

