COLLEGE OF SCIENCE AND TECHNOLOGY

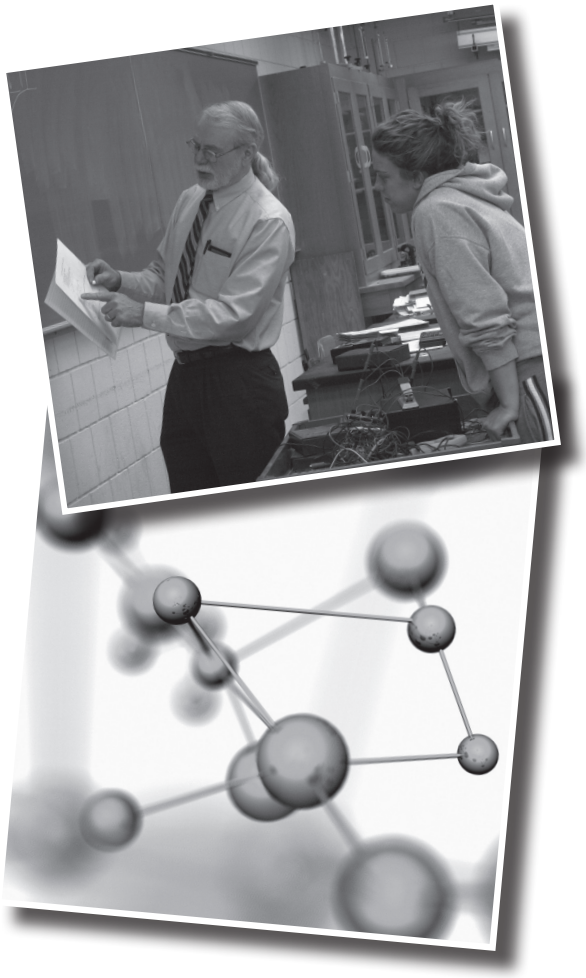
FAIRMONT STATE UNIVERSITY

Physics Education Program

OVERVIEW OF THE PROGRAMS

The science education program is designed to provide a strong content background in one or more science disciplines and extensive practice using constructivist teaching strategies to prepare teacher candidates for today's classroom. Certifications (specializations) are available in Biology (9-12), Chemistry (9-12), Physics (9-12), and General Science (5-12). Our program provides early teaching opportunities in middle school classrooms, workshops in association with the NASA IV&V Facility Educator Research Center, and research experiences using a radio telescope at the National Radio Astronomy Observatory in Green Bank, WV.

Science education students earn the B.A. Degree in Education with specializations in two or more science areas. Some students choose to double major, earning both a B.S. in a science discipline (e.g., chemistry or biology) and a B.A. in Education.



EMPLOYMENT OPPORTUNITIES

Students graduating from Fairmont State with science teaching specializations are typically recruited prior to graduation by area schools and/or by school districts in Maryland, Virginia, and North Carolina. Many graduates begin teaching at the middle school level before moving into a high school position. The biology, chemistry, or physics certification coupled with a general science certification provides the widest range of teaching opportunities. Due to the shortage of physics teachers, graduates with the physics specialization are heavily recruited.

GRADUATE OPPORTUNITIES

Many science education graduates eventually continue on in their education to pursue a Master of Education (M.Ed.) degree. The Master of Arts in Teaching degree is another new option at Fairmont State for those who already have a bachelor's degree or higher with substantial science content.

fast fact

The annual median wage for a Physics teacher is $70,090.00, and the projected need for this career field is expected to increase by 21% until 2016.

FOR MORE INFORMATION VISIT

www.fairmontstate.edu/academics/collegeofscitech/default.asp

CONTACT INFORMATION

Dr. Anthony F. Gilberti
Dean, College of Science and Technology
Room 302c, Engineering Technology
Phone: (304) 367-4642
E-mail: Anthony.Gilberti@fairmontstate.edu

NOTES

MODEL SCHEDULE

Physics Education Program (B.A.)

FRESHMAN FIRST SEMESTER

CHEM	1105	CHEMICAL PRINCIPLES I	5
COMM	2200 OR 2201 OR 2202		3
EDUC	2200	INTRODUCTION TO EDUCATION	3
ENGL	1104	WRITTEN ENGLISH I	3
MATH	1185/1190	APPLIED CALC I/CALCULUS I	4
			18

FRESHMAN SECOND SEMESTER

CHEM	1106	CHEMICAL PRINCIPLES II	4
CHEM	1113	PRAC. SCIENTIFIC STATS	1
ENGL	1108	WRITTEN ENGLISH II	3
EDUC	2201	INSTRUCTIONAL TECHNOLOGY	3
MATH	1186/3315	APPLIED CALC II/CALCULUS II	4
			15

SOPHOMORE FIRST SEMESTER

BIOL	1105	BIOLOGICAL PRINCIPLES I	4
EDUC	2203	HUMAN DEVELOPMENT, LEARNING AND TEACHING	3
PHYS	1105	PRINCIPLES OF PHYSICS I	5
-OR-			
PHYS	1101	INTRODUCTION TO PHYSICS I	4
G.S. ELECTIVE			1
G.S. ELECTIVE			3
			15-16

SOPHOMORE SECOND SEMESTER

BIOL	1106	BIOLOGICAL PRINCIPLES II	4
EDUC	2240	HIGH INCIDENCE DISABILITES FOR EDUCATORS	3
MATH	1186	APPLIED CALC II	4
-OR-			
MATH	3315	CALCULUS II	4
PHYS	1106	PRINCIPLES OF PHYSICS II	5
-OR-			
PHYS	1102	INTRODUCTION TO PHYSICS II	4
			15-16

JUNIOR FIRST SEMESTER

EDUC	2260	INSTRUCTIONAL DESIGN I	3
EDUC	2265	FIELD EXPERIENCE II	1
GEOL	1101	PHYSICAL GEOLOGY	4
PHYS	3311	INTERMEDIATE PHYSICS IA	3
PHYS	3312	INTERMEDIATE PHYSICS IB	3
G.S. ELECTIVE			3
			17

JUNIOR SECOND SEMESTER

EDUC	3331	READING IN THE CONTENT AREAS	3
GEOL	1102	HISTORICAL GEOLOGY	4
PHSC	4431	METHODS & MATERIALS	3
PHYS	3321	INTERMEDIATE PHYSICS IIA	3
PHYS	3322	INTERMEDIATE PHYSICS IIB	3
GENERAL STUDIES CIVILIZATION			3
			19

SENIOR FIRST SEMESTER

EDUC	3351	INCLUSIVE CLASSROOM PRACTICES	3
EDUC	3340	INSTRUCTIONAL DESIGN II	3
EDUC	3365	FIELD EXPERIENCE III	2
PHYS	3330	INTERMEDIATE PHYSICS LAB	2
PHYS	2202	ASTRONOMY (EVEN YEARS)	3
PHSC	4430	SCIENCE INTEGRATION SEMINAR	1
G.S. ELECTIVE			3
			17

SENIOR SECOND SEMESTER

EDUC	4485	ACTION RESEARCH	1
EDUC	4486	PORTFOLIO	1
EDUC	4496	SECONDARY STUDENT TEACHING	10
			12