

Chemistry Program

OVERVIEW OF THE PROGRAM:

The mission of the Chemistry Program at Fairmont State University is to educate students about chemistry and its connection to other sciences. We support students in developing the analytical, problem solving and teamwork skills necessary to successfully pursue science-based careers through our small class sizes, innovative teaching approaches and access to research-quality instrumentation.

Programs available for students who wish to specialize in chemistry include a B.S. degree in chemistry, a B.S. degree in chemistry with an emphasis in biotechnology, and a B.A. in education with a chemistry teaching field.

EMPLOYMENT OPPORTUNITIES:

A student completing the B.S. degree with a major in chemistry will be competitive for graduate study in chemistry or chemical engineering, laboratory positions in the chemical or pharmaceutical industry or government agencies, or law school. FSU chemistry graduates have been accepted to chemistry graduate programs at schools such as Northwestern, Penn State, West Virginia University, University of North Carolina at Chapel Hill, Texas A&M, Georgia Tech, and Johns Hopkins, and have found employment as chemical professionals at institutions such as Mylan Pharmaceuticals, NIOSH (National Institutes of Occupational Safety and Health), Dupont, Dow Chemical, and environmental testing laboratories. By electing two additional biology classes and/or taking the further steps to complete the biotechnology emphasis, students completing a B.S. degree in chemistry will be prepared for application to a variety of professional and graduate schools, including medical school, dental school, veterinary school, physical therapy programs, toxicology, pharmaceutical science and forensic science graduate programs.

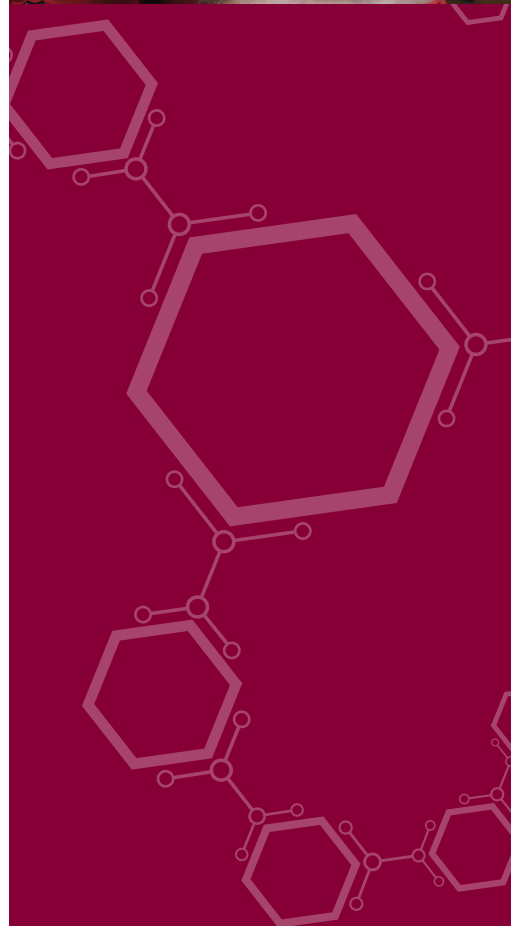
The annual median wage for a Chemist is \$72,350.00.

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**FAIRMONT STATE
UNIVERSITY™**

**College of Science and
Technology**



CONTACT INFORMATION

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**BACHELOR OF SCIENCE IN CHEMISTRY
MODEL SCHEDULE – MATH ACT 21-UP *****

Entering in an ODD year Fall:

FRESHMAN FIRST SEMESTER		
CHEM 1105	CHEMICAL PRINCIPLES.....	5
MATH 1530	COLLEGE ALGEBRA (OR HIGHER***).....	3
ENGL 1101	WRITTEN ENGLISH I.....	3
G.S./ELECTIVE	.....	5
		16
FRESHMAN SECOND SEMESTER		
CHEM 2200	FOUNDATIONAL BIOCHEMISTRY.....	4
MATH 1540	TRIGONOMETRY (OR HIGHER***).....	3
ENGL 1102	WRITTEN ENGLISH II.....	3
G.S./ELECTIVE	.....	6
		16
SOPHOMORE FIRST SEMESTER		
CHEM 2201	ORGANIC CHEMISTRY I.....	4
MATH 2501	CALCULUS I (OR MATH 1190).....	4
PHYS 1105	PRINCIPLES OF PHYSICS I (OR PHYS 1101).....	5
G.S./ELECTIVE	.....	3
		16
SOPHOMORE SECOND SEMESTER		
CHEM 2202	ORGANIC CHEMISTRY II.....	4
PHYS 1106	PRINCIPLES OF PHYSICS II (OR PHYS 1102).....	5
MATH 2502	CALCULUS II (OR MATH 3315).....	4
G.S./ELECTIVE	.....	3
		16
JUNIOR FIRST SEMESTER		
CHEM 3301	PHYSICAL CHEMISTRY I.....	4
CHEM 3304	INORGANIC CHEMISTRY.....	4
G.S./ELECTIVE	.....	6
		14
JUNIOR SECOND SEMESTER		
CHEM 2205	ANALYTICAL CHEMISTRY.....	4
CHEM 4412	PHYSICAL CHEMISTRY II.....	4
G.S./ELECTIVE	.....	3
G.S.	.....	3
		14
SENIOR FIRST SEMESTER		
CHEM 3315	INSTRUMENTAL ANALYSIS.....	4
CHEM 4404	SYNTHETIC METHODS AND MATERIALS.....	4
G.S./ELECTIVE	.....	6
G.S./ELECTIVE	.....	3
G.S./ELECTIVE	.....	3
		14
SENIOR SECOND SEMESTER		
BIOL 3360	BIOCHEMISTRY.....	4
G.S./ELECTIVE	.....	10
		14

Note: Math ACT requirements may be satisfied by SAT, Compass or Accuplacer score equivalents, per Fairmont State University policy found in the Academic Catalog.

**BACHELOR OF SCIENCE IN CHEMISTRY
MODEL SCHEDULE – MATH ACT 21-UP *****

Entering in an EVEN year Fall:

FRESHMAN FIRST SEMESTER		
CHEM 1105	CHEMICAL PRINCIPLES.....	5
MATH 1530	COLLEGE ALGEBRA (OR HIGHER***).....	3
ENGL 1101	WRITTEN ENGLISH I.....	3
G.S./ELECTIVE	.....	5
		16
FRESHMAN SECOND SEMESTER		
CHEM 2200	FOUNDATIONAL BIOCHEMISTRY.....	4
MATH 1540	TRIGONOMETRY (OR HIGHER***).....	3
ENGL 1102	WRITTEN ENGLISH II.....	3
G.S./ELECTIVE	.....	6
		16
SOPHOMORE FIRST SEMESTER		
CHEM 2201	ORGANIC CHEMISTRY I.....	4
CHEM 3304	INORGANIC CHEMISTRY.....	4
MATH 2501	CALCULUS I (OR MATH 1190).....	4
G.S./ELECTIVE	.....	4
		15
SOPHOMORE SECOND SEMESTER		
CHEM 2202	ORGANIC CHEMISTRY II.....	4
MATH 2502	CALCULUS II (OR MATH 3315).....	4
G.S./ELECTIVE	.....	6
		14
JUNIOR FIRST SEMESTER		
CHEM 4404	SYNTHETIC METHODS AND MATERIALS.....	4
PHYS 1105	PRINCIPLES OF PHYSICS I (OR PHYS 1101).....	5
G.S./ELECTIVE	.....	3
G.S./ELECTIVE	.....	3
		15
JUNIOR SECOND SEMESTER		
CHEM 2205	ANALYTICAL CHEMISTRY.....	4
PHYS 1106	PRINCIPLES OF PHYSICS II (OR PHYS 1102).....	5
G.S./ELECTIVE	.....	3
G.S.	.....	3
		15
SENIOR FIRST SEMESTER		
CHEM 3301	PHYSICAL CHEMISTRY I.....	4
CHEM 3315	INSTRUMENTAL ANALYSIS.....	4
G.S./ELECTIVE	.....	6
		14
SENIOR SECOND SEMESTER		
CHEM 4412	PHYSICAL CHEMISTRY II.....	4
BIOL 3360	BIOCHEMISTRY.....	4
G.S./ELECTIVE	7
		15

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