Physical Science, A.S.

Students interested in a physical science are encouraged to earn a baccalaureate degree (BS). The AS-PHSC degree is meant prepare students on the path to a physical science baccalaureate degree (BS) such as geology (BS-GEOL), physics (BS-PHYS), or chemistry (BS-CHEM).

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		**60**
General Education Requirements		**37 Credits**
ENGL 1010	Introduction to Academic Writing CC	3
or ENGH 1005	Literacies and Composition Across Contexts CC	
ENGL 2010	Intermediate Academic Writing CC	3
MATH 1050	College Algebra QL	4
or MATH 1055	College Algebra with Preliminaries QL	
Complete one of the following:		3
HIST 2700	US History to 1877 AS (3)	
or HIST 2710	US History since 1877 AS	
HIST 1700	American Civilization AS (3)	
HIST 1740	US Economic History AS (3)	
POLS 1000	American Heritage AS (3)	
POLS 1100	American National Government AS (3)	
Complete the following:		
PHIL 2050	Ethics and Values IH	3
or PHIL 205G	Ethics and Values IH GI	
HLTH 1100	Personal Health and Wellness TE	2
or EXSC 1097	Fitness for Life TE	
Distribution Courses:		
Biology		3
Physical Science		
Complete one of the following groups of courses		7
PHYS 2210	Physics for Scientists and Engineers I PP (4)	
PHYS 2220	Physics for Scientists and Engineers II PP (4)	
OR		
CHEM 1210	Principles of Chemistry I PP (4)	
CHEM 1220	Principles of Chemistry II PP (4)	
OR		
GEO 1010	Introduction to Geology PP (3)	
or GEO 1030	Natural Disasters and the Environment PP	
or GEO 1040	The Dinosaurian World PP	
or GEO 1050	Geology of National Parks PP	
CHEM 1210	Principles of Chemistry I PP (4)	
Humanities		3
Fine Arts		3
Social/Behavioral Science		3
Core Discipline Requirements		**11 Credits**
Complete one of the following		11
Recommended for students most interested in physics:		
MATH 1210	Calculus I QL (4)	
MATH 1220	Calculus II (4)	

PHYS 2215	Physics for Scientists and Engineers I Lab (1)	
PHYS 2225	Physics for Scientists and Engineers II Lab (1)	
Any 1000- or 2000-level PHYS elective (1)		
Recommended for students most interested in chemistry:		
CHEM 1215	Principles of Chemistry I Laboratory (1)	
CHEM 1225	Principles of Chemistry II Laboratory (1)	
CHEM 2310	Organic Chemistry I (4)	
CHEM 2315	Organic Chemistry I Laboratory (1)	
CHEM 2320	Organic Chemistry II (4)	
CHEM 2325	Organic Chemistry II Laboratory (1)	
Recommended for students most interested in earth science:		
CHEM 1215	Principles of Chemistry I Laboratory (1)	
CHEM 1220	Principles of Chemistry II PP (4)	
CHEM 1225	Principles of Chemistry II Laboratory (1)	
GEO 1015	Introduction to Geology Laboratory (1)	
GEO 1220	Historical Geology (3)	
GEO 1225	Historical Geology Laboratory (1)	
Elective Requirements		**12 Credits**
Complete 12 credits from the following (not to include any course being used to fill one of the requirements above). Consult with an advisor to determine which courses best match your long-term educational and career goals.		12
CHEM 1210	Principles of Chemistry I PP (4)	
CHEM 1215	Principles of Chemistry I Laboratory (1)	
CHEM 1220	Principles of Chemistry II PP (4)	
CHEM 1225	Principles of Chemistry II Laboratory (1)	
CHEM 2310	Organic Chemistry I (4)	
CHEM 2315	Organic Chemistry I Laboratory (1)	
CHEM 2320	Organic Chemistry II (4)	
CHEM 2325	Organic Chemistry II Laboratory (1)	
ENVT 1110	Introduction to Environmental Management PP (3)	
ENVT 2730	Introduction to Soils (4)	
GEO 1010	Introduction to Geology PP (3)	
or GEO 1030	Natural Disasters and the Environment PP	
or GEO 1040	The Dinosaurian World PP	
or GEO 1050	Geology of National Parks PP	
GEO 1080	Introduction to Oceanography PP (3)	
GEO 1220	Historical Geology (3)	
GEO 1225	Historical Geology Laboratory (1)	
GEO 2500	Introduction to Field Geology (undefined)	
GEOG 1000	Introduction to Physical Geography PP (3)	
GEOG 1800	Mapping the World with Geospatial Technology PP (undefined)	
MATH 1060	Trigonometry QL (3)	
MATH 1210	Calculus I QL (4) (MATH 1060 is a prerequisite for this course.)	
MATH 1220	Calculus II (4)	
MATH 2210	Calculus III (4)	
MATH 2270	Linear Algebra (3)	
MATH 2280	Ordinary Differential Equations (3)	
METO 1010	Introduction to Meteorology PP (3)	
METO 1060	Fundamentals of Weather Forecasting PP (3)	
PHYS 2210	Physics for Scientists and Engineers I PP (4)	
PHYS 2215	Physics for Scientists and Engineers I Lab (1)	
PHYS 2220	Physics for Scientists and Engineers II PP (4)	

PHYS 2225	Physics for Scientists and Engineers II Lab (1)
STAT 1040	Introduction to Statistics QL (3)

Graduation Requirements

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http://www.uvu.edu/wolverinetrack/).

First Year		
Semester 1		**Credit Hours**
ENGL 1010 or ENGH 1005	Introduction to Academic Writing CC or Literacies and Composition Across Contexts CC	3
MATH 1050 or MATH 1055	College Algebra QL or College Algebra with Preliminaries QL	4
American Institutions		3
Humanities Distribution		3
HLTH 1100 or EXSC 1097	Personal Health and Wellness TE or Fitness for Life TE	2
	Credit Hours	**15**
Semester 2		
ENGL 2010	Intermediate Academic Writing CC	3
Biology Distribution		3
CHEM 1210	Principles of Chemistry I PP	4
CHEM 1215	Principles of Chemistry I Laboratory	1
Social/Behavioral Distribution		3
	Credit Hours	**14**
Second Year		
Semester 3		
PHIL 2050 or PHIL 205G	Ethics and Values IH or Ethics and Values IH GI	3
Elective Requirement		3
MATH 1210	Calculus I QL	4
Fine Arts Distribution		3
	Credit Hours	**13**
Semester 4		
MATH 1220	Calculus II	4
PHYS 2210	Physics for Scientists and Engineers I PP	4
PHYS 2215	Physics for Scientists and Engineers I Lab	1
Elective Requirement		4
	Credit Hours	**13**
Third Year		
Semester 5		
PHYS 2220	Physics for Scientists and Engineers II PP	4
PHYS 2225	Physics for Scientists and Engineers II Lab	1
	Credit Hours	**5**
	Total Credit Hours	**60**

Program Learning Outcomes

1. Develop broad foundational knowledge in the physical sciences by correctly using evidence, experiment and observation, interpretation, and physical concepts.
2. Demonstrate patterns of critical, scientific, and quantitative reasoning in application to problems or issues related to the physical sciences.
3. Follow practices necessary to safely and ethically use laboratory or other measurement equipment used in the physical sciences.

4. Graduate with a breadth of physical science knowledge enabling students to select and proceed with a BS degree program within the physical sciences.