

NATURAL SCIENCES, B.S.

The major in natural sciences prepares students for employment as teachers and/or scientists in industrial laboratories and for further study in the sciences. Students take courses in biology, chemistry, physics, earth science and mathematics. The laboratory work will build skills for planning and carrying out laboratory experiments in science and provide students with an intellectual foundation that will help them understand recent advances in science and technology.

Although any student may choose natural sciences as a major, the program is ideally suited for students interested in pursuing a career as an Early Childhood Education (P-3), Elementary Education (K-6), or English as a Second Language (ESL) science teacher. Empowered by knowledge from mathematics and all the branches of the natural sciences, students can serve their community as successful science teachers and be able to be leaders for science education in their schools.

Transfer Regulations

Students must complete a minimum of 24 credits in the natural sciences program at Georgian Court, including SC405 Earth Science.

Learning Outcomes

See Biology and Chemistry Student Learning Outcomes.

Requirements

To earn this degree, students must successfully complete at least 120 credits, including General Education (<http://catalog.georgian.edu/undergraduate/academic-programs/bridge-general-education-program-requirements/>) requirements and the major requirements below.

Major Sequence

A minimum of 38 credits in the natural sciences, plus courses in related areas, is required for the B.S. in Natural Sciences degree. The required science courses are:

Code	Title	Credits
Natural Sciences Courses		
BI109	Environmental Biology	4.0
BI111	Life: Human Biology	4.0
CH113	General Chemistry I	4.0
CH151 or CH114	Chemistry for the Health Sciences General Chemistry II	4.0
PH111 or PH115	Physics in Everyday Life I College Physics I	4.0
PH112 or PH116	Physics in Everyday Life II College Physics II	4.0
CH211	Chemistry of the Elements	3.0
SC405	Earth Science	4.0
Group I		
Select one of the following:		3.0-4.0
BI305	Biological Interactions: Ecology	
BI310	Ecology & Health	
BI324	Botany	
BI325	Animals and Parasites	
Group II		

Select one of the following: 4.0

PH334	Astronomy & Cosmology
PH337	Physics of Meteorology
SC393	Coastal Geomorphology
SC433	Oceanography

Related Courses

Group III

Select one of the following: 3.0

MA103	Introduction to Statistical Thinking
BI203	Experimental Design & Statistics
MA331	Probability & Statistics I

Group IV ¹

Select two of the following: 6.0-8.0

MA109	College Algebra
MA110	Precalculus
MA115	Calculus I
MA116	Calculus II
CS111	Foundations Of Computer Science
CS123	Computer Programming I
MA209	Linear Algebra
MA210	Discrete Mathematics

Total Credits 47.0-50.0

¹ The first math course to be taken from group IV will be determined by the student's score on the mathematics placement test. The choice of the other math course from group IV should be made based on the recommendation of the academic advisor.

A student must earn a GPA of 2.5 or better after completing 24 of the required credits to continue the program.

Degree Map(s)

Course	Title	Credits
First Year		
Fall Semester		
GEN101	Pathway to the Bridge ¹	2.0
EN111 or EN221	Academic Writing and Research I ¹ or Honors Argument: Rhetoric & Research	3.0
Math 1 from Math Group III ^{1,2}		3.0
BI111	Life: Human Biology ^{1,2}	4.0
PH111	Physics in Everyday Life I ²	4.0
Credits		16.0
Spring Semester		
GEN199	WI:Discovering Self in the Universe ¹	3.0
Creative Thinking & Expression ¹		3.0
Math 2 from Math Group IV ²		3.0-4.0
BI109	Environmental Biology ²	4.0
PH112	Physics in Everyday Life II ²	4.0
Credits		17.0-18.0
Second Year		
Fall Semester		
Intercultural Understanding & Intercultural Communication ¹		3.0

Critical Reading & Analysis ¹	3.0
Math 2 from Math Group IV ^{1,2}	3.0-4.0
CH113 General Chemistry I ²	4.0
Elective	3.0

Credits 16.0-17.0

Spring Semester

Understanding Human Behavior & Social Systems ¹	3.0
CH114 General Chemistry II ² or CH151 or Chemistry for the Health Sciences	4.0
Elective	3.0
Elective	3.0

Credits 13.0

Third Year

Fall Semester

Select one of the following ¹	3.0
Religious Studies	
Power & Society	
Ethics	
Science from Science Group II ²	4.0
CH211 Chemistry of the Elements ²	3.0
Elective	3.0
Elective	3.0

Credits 16.0

Spring Semester

Select two of the following: ¹	6.0
Religious Studies	
Power & Society	
Ethics	
GEN400 WI:Visioning a Future	
Science from Group I ²	4.0
SC405 Earth Science ²	4.0

Credits 14.0

Fourth Year

Fall Semester

Select one of the following: ¹	3.0
Religious Studies	
Power & Society	
Ethics	
GEN400 WI:Visioning a Future	
Elective	3.0
Elective	3.0
Elective	3.0
Elective	3.0

Credits 15.0

Spring Semester

Elective	3.0
Elective	3.0
Elective	3.0
Elective	3.0

Credits 12.0

Total Credits 119.0-121.0

¹ General Education

² Major

Science Group I

Code	Title	Credits
BI305	Biological Interactions: Ecology	4.0
BI324	Botany	4.0
BI325	Animals and Parasites	4.0

Science Group II

Code	Title	Credits
PH334	Astronomy & Cosmology	4.0
PH337	Physics of Meteorology	4.0
SC393	Coastal Geomorphology	4.0
SC433	Oceanography	4.0

Math Group III

Code	Title	Credits
MA103	Introduction to Statistical Thinking	3.0
BI203	Experimental Design & Statistics	3.0
MA331	Probability & Statistics I	3.0

Math Group IV

Code	Title	Credits
MA109	College Algebra	3.0
MA110	Precalculus	3.0
MA115	Calculus I	4.0
MA116	Calculus II	4.0
CS111	Foundations Of Computer Science	3.0
CS123	Computer Programming I	4.0
MA209	Linear Algebra	3.0
MA210	Discrete Mathematics	3.0