

CELLULAR BIOLOGY (BS DEGREE TRACK)

(72 credits)

Code	Title	Credits
Core Requirements (23 Credits)		
BIO201 & BIO211	General Biology I and Gen Bio 1 Lab ¹	4
BIO202 & BIO212	General Biology II and Gen Bio 2 Lab ¹	4
BIO320 & BIO321	Genetics and Genetics Lab ²	4
BIO322	Evolution ²	3
CHE201 & CHE211	General Chemistry I and General Chemistry I Lab ³	4
CHE202 & CHE212	General Chemistry II and General Chemistry II Lab ³	4
Participation in Lecture Series (6 hours)		0
Required Concentration Courses (8 Credits)		
BIO358	Molecular Biology	4
BIO359	Cell Biology	4
Concentration Electives (17 Credits)		
Select 17 credits of the following:		17
Architecture of Life (at least 7 credits):		
BIO311	Developmental Plant Anatomy	
BIO350	General Microbiology	
BIO388	Biological Chemistry	
BIO413	Developmental Biology	
BIO444	Nucleic Acid Technologies	
BIO448	Host-Microbe Coevolution	
BIO451	Capstone Microbiology	
BCM360	Protein Structure and Function	
BCM461	Biochemistry 1	
BCM463	Biochemistry Lab	
BCM470	Biochemistry 2	
Capstone: Select at least 6 credits, including at least 3 credits in 400-level Architecture of Life courses (BIO4xx)		
Cognate Requirements (24 Credits)		
CHE318 & CHE306	Organic Chemistry I and Organic Chemistry I Lab	4
CHE319 & CHE309	Organic Chemistry II and Organic Chemistry II Lab	4
MAT251	Calculus I	4
MAT252	Calculus II	4
PHY201 & PHY211	General Physics 1 and Physics 1 Laboratory	4
PHY202 & PHY212	General Physics 2 and General Physics 2 Lab	4
Total Credits		72

minimum grade of C- is required in BIO201 General Biology I and BIO202 General Biology II .

² A minimum grade of C- in BIO320 Genetics is required to advance to most upper-division biology courses (300 and above).

³ A minimum grade of C- is required to advance from CHE201 General Chemistry I to CHE202 General Chemistry II and from CHE202 General Chemistry II to CHE318 Organic Chemistry I .

Additional considerations for admission to graduate programs in biology: It is important that students interested in graduate study be able to demonstrate undergraduate research experience. You should begin to explore research options during your sophomore year.

Additional considerations for admission to medical, dental and veterinary schools: Contact the [Pre-Health Advisor \(adaird@newpaltz.edu\)](mailto:adaird@newpaltz.edu) for information.

¹ BIO201 General Biology I /BIO211 Gen Bio 1 Lab and BIO202 General Biology II /BIO212 Gen Bio 2 Lab must be taken in sequence. A