## **Cell/Molecular Emphasis**

## **BIOLOGY Major**

## This disciplinary emphasis also requires:

Completion of an interdisciplinary major or minor (http://catalog.uwgb.edu/archive/2017-2018/undergraduate/planning/interdisciplinary-majors-minors)

Code	Title	Credits
Supporting Courses		28-29
BIOLOGY 201	Principles of Biology: Cellular and Molecular Processes	
& BIOLOGY 202	and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203	Principles of Biology: Organisms, Ecology, and Evolution	
& BIOLOGY 204	and Principles of Biology Lab: Organisms, Ecology, and Evolution	
CHEM 211	Principles of Chemistry I	
& CHEM 213	and Principles of Chemistry I Laboratory	
CHEM 212	Principles of Chemistry II	
& CHEM 214	and Principles of Chemistry II Laboratory	
MATH 260	Introductory Statistics	
Mathematics (choose one cou	•	
COMP SCI 256	Introduction to Software Design	
MATH 104	Elementary Functions: Algebra and Trigonometry	
MATH 201	Calculus for the Management and Social Sciences	
MATH 202	Calculus and Analytic Geometry I	
Writing (choose one course):		
ENG COMP 105	Expository Writing	
INFO SCI 390	Technical Writing	
Upper Level Courses		30-33
Required courses		
BIOLOGY 302	Principles of Microbiology	
BIOLOGY 303	Genetics	
BIOLOGY 307	Cell Biology	
BIOLOGY 308	Cell Biology Laboratory	
BIOLOGY 309	Evolutionary Biology	
BIOLOGY 311	Plant Physiology	
or BIOLOGY 346	Comparative Physiology	
BIOLOGY 407	Molecular Biology	
ENV SCI 302	Principles of Ecology	
Minimum of 4 credits of the fo	llowing courses:	
CHEM 300	Bio-Organic Chemistry	
& CHEM 301	and Bio-Organic Chemistry Laboratory	
CHEM 302	Organic Chemistry I	
& CHEM 304	and Organic Chemistry Laboratory I	
Choose a minimum of 5 credit	s from the following courses:	
BIOLOGY 304	Genetics Laboratory	
BIOLOGY 312	Mycology	
BIOLOGY 322	Environmental Microbiology	
BIOLOGY 402	Advanced Microbiology	
BIOLOGY 408	Molecular Biology Laboratory	
BIOLOGY 410	Developmental Biology	
BIOLOGY 411	Developmental Biology Laboratory	
CHEM 330	Biochemistry	

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CHEM 331	Biochemistry Laboratory
HUM BIOL 422	Immunology
HUM BIOL 423	Immunology Lab
HUM BIOL 444	Endocrinology
Seminar, 1 credit required	
BIOLOGY 490	Biology Seminar

Total Credits 58-62