Biology Major

Area of Emphasis

Students must complete requirements in one of the following areas of emphasis:

- Animal Biology
- Animal Biology (Accelerated) Integrated with graduate Environmental Science & Policy program
- Aquaculture
- Aquatic Ecology and Fisheries Emphasis
- · Biology for Educators
- Cell/Molecular
- Ecology and Conservation
 - Ecology and Conservation (Accelerated) Integrated with graduate Environmental Science & Policy Program
- Microbiology
- Pre-Veterinary

Animal Biology

-	ode	Title	Credits
S	upporting Courses		25-29
	BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
	BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	
	CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory	
	CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	
	MATH 260	Introductory Statistics	
	Mathematics (choose one cours	se):	
	MATH 104	Precalculus	
	MATH 202	Calculus and Analytic Geometry I	
	ENV SCI 336	Environmental Statistics	
	ENV SCI 337	Environmental GIS	
	Writing (choose one course): ¹		
	INFO SCI 390	Technical Writing	
	WF 105	Research and Rhetoric	
U	pper Level Courses		30-33
	Required courses		
	BIOLOGY 303	Genetics	
	BIOLOGY 309	Evolutionary Biology	
	ENV SCI 302	Principles of Ecology	
	BIOLOGY 307	Cell Biology	
	& BIOLOGY 308	and Cell Biology Laboratory	
	or BIOLOGY 323	Principles of Microbiology	
	or BIOLOGY 322	Environmental Microbiology	
	BIOLOGY 311	Plant Physiology	
	or BIOLOGY 346	Comparative Physiology	
	Choose 12-14 credits from the fe	ollowing courses:	
	BIOLOGY 304	Genetics Laboratory	
	BIOLOGY 310	Plant Biodiversity	
	BIOLOGY 320	Field Botany	
	BIOLOGY 322	Environmental Microbiology	

BIOLOGY 340	Comparative Anatomy of Vertebrates	
BIOLOGY 341	Ichthyology	
BIOLOGY 342	Ornithology	
BIOLOGY 343	Mammalogy	
BIOLOGY 345	Animal Behavior	
BIOLOGY 346	Comparative Physiology	
BIOLOGY 355	Entomology	
BIOLOGY 357	Marine Biology	
BIOLOGY 365	Aquatic Invertebrates	
BIOLOGY 401	Fish and Wildlife Population Dynamics	
BIOLOGY 410	Developmental Biology	
BIOLOGY 411	Developmental Biology Laboratory	
ENV SCI 337	Environmental GIS	
ENV SCI 401	Stream Ecology	
ENV SCI 403	Limnology	
HUM BIOL 402	Human Physiology	
HUM BIOL 403	Human Physiology Laboratory	
HUM BIOL 413	Neurobiology	
HUM BIOL 422	Immunology	
HUM BIOL 423	Immunology Lab	
HUM BIOL 444	Endocrinology	
BIOLOGY 449	Wetland Ecology	
Seminar, 1 credit required		
BIOLOGY 490	Biology Seminar	
tal Credits 55-62		

¹ Satisfied with an ACT English score of 32 or higher

Animal Biology (Accelerated) - Integrated with graduate Environmental Science & Policy program

Code	Title	Credits
Supporting Courses		25-29
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	
CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	
MATH 260	Introductory Statistics	
Mathematics (choose one cours	se):	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Writing (choose one course): ¹		
INFO SCI 390	Technical Writing	
WF 105	Research and Rhetoric	
Upper Level Courses		30-33
Required courses		
BIOLOGY 303	Genetics	
BIOLOGY 309	Evolutionary Biology	

BIOLOGY 307 Cell Biology & BIOLOGY 308 and Cell Biology Laboratory or BIOLOGY 302 Principles of Microbiology or BIOLOGY 322 Environmental Microbiology BIOLOGY 311/511 Plant Physiology # or BIOLOCY 246 Comparative Physiology
or BIOLOGY 302Principles of Microbiologyor BIOLOGY 322Environmental MicrobiologyBIOLOGY 311/511Plant Physiology #
or BIOLOGY 322 Environmental Microbiology BIOLOGY 311/511 Plant Physiology #
BIOLOGY 311/511 Plant Physiology [#]
ar BIOLOCV 246
or BIOLOGY 346 Comparative Physiology
Choose 12-14 credits from the following courses:
BIOLOGY 304 Genetics Laboratory
BIOLOGY 310/510 Plant Biodiversity [#]
BIOLOGY 320/520 Field Botany #
BIOLOGY 322/522 Environmental Microbiology #
BIOLOGY 340 Comparative Anatomy of Vertebrates
BIOLOGY 341/541 Ichthyology [#]
BIOLOGY 342/542 Ornithology [#]
BIOLOGY 343/543 Mammalogy [#]
BIOLOGY 345 Animal Behavior
BIOLOGY 346 Comparative Physiology
BIOLOGY 355/555 Entomology #
BIOLOGY 357/557 Marine Biology [#]
BIOLOGY 365 Aquatic Invertebrates
BIOLOGY 401/601 Fish and Wildlife Population Dynamics #
BIOLOGY 410 Developmental Biology
BIOLOGY 411 Developmental Biology Laboratory
ENV SCI 337/537 Environmental GIS #
ENV SCI 401/601 Stream Ecology [#]
ENV SCI 403/603 Limnology [#]
HUM BIOL 402/602 Human Physiology [#]
HUM BIOL 403 Human Physiology Laboratory
HUM BIOL 413 Neurobiology
HUM BIOL 422 Immunology
HUM BIOL 423 Immunology Lab
HUM BIOL 444 Endocrinology
Seminar, 1 credit required
BIOLOGY 490 Biology Seminar

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Students must be granted permission through the department to enroll in graduate level coursework. For more information, contact the graduate Environmental Science & Policy office or refer to the graduate catalog (http://catalog.uwgb.edu/graduate/general-information/academic-rulesregulations/undergrad-in-accelerated/).

Aquaculture

Code Supporting Courses	Title	Credits 28
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	
CHEM 207	Laboratory Safety	
CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	

MATH 260	Introductory Statistics	
Mathematics (choose o	Mathematics (choose one course):	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Writing (choose one co	ourse):	
WF 105	Research and Rhetoric	
INFO SCI 390	Technical Writing	
Upper Level Courses		36
Required Courses		
BIOLOGY 303	Genetics	
BIOLOGY 341	Ichthyology	
BIOLOGY 360	Early Life History of Fish	
BIOLOGY 361	Introduction to Aquaculture	
BIOLOGY 461	Advanced Aquaculture	
CHEM 300	Bio-Organic Chemistry	
& CHEM 301	and Bio-Organic Chemistry Laboratory	
ENV SCI 302	Principles of Ecology	
ENV SCI 403	Limnology	
Choose one of the follo	owing courses:	
BIOLOGY 307	Cell Biology	
& BIOLOGY 308	and Cell Biology Laboratory	
or BIOLOGY 302	Principles of Microbiology	
or BIOLOGY 322	Environmental Microbiology	
Choose one of the follo	-	
BIOLOGY 309	Evolutionary Biology	
or BIOLOGY 346	Comparative Physiology	
Seminar		1
BIOLOGY 490	Biology Seminar	
Total Credits		65

Aquatic Ecology and Fisheries

Code	Title	Credits
Supporting Courses		28
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	
CHEM 207	Laboratory Safety	
CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	
MATH 260	Introductory Statistics	
Mathematics (choose one cours	se):	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Writing (choose one course):		
WF 105	Research and Rhetoric	

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90	Biology Seminar	
		1
01	Fish and Wildlife Population Dynamics	
70	Fisheries Research and Management	
Choose one of the following courses:		
3	Limnology	
1	Stream Ecology	
e of the following co	urses:	
65	Aquatic Invertebrates	
41	Ichthyology	
e of the following co	urses:	
2	Principles of Ecology	
49	Wetland Ecology	
60	Early Life History of Fish	
46	Comparative Physiology	
22	Environmental Microbiology	
09	Evolutionary Biology	
03	Genetics	
ourses		
ourses		36
90	Technical Writing	
	Sourses ourses 03 09 22 46 60 49 2 e of the following co 41 65 e of the following co 1 3 e of the following co 70	Sourses ourses 03 Genetics 09 Evolutionary Biology 22 Environmental Microbiology 24 Comparative Physiology 60 Early Life History of Fish 49 Wetland Ecology 21 Principles of Ecology 26 Aquatic Invertebrates 41 Ichthyology 65 Aquatic Invertebrates 41 Ichthyology 65 Aquatic Invertebrates 47 Stream Ecology 3 Limnology 3 Einensecology 70 Fisheries Research and Management

Biology for Educators

Code	Title	Credits
Supporting Courses		25-29
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	
CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	
MATH 260	Introductory Statistics	
Mathematics (choose one course	se):	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Writing (choose one course):		
INFO SCI 390	Technical Writing	
WF 105	Research and Rhetoric	
Upper Level Courses		30-33
Required courses		
BIOLOGY 307 & BIOLOGY 308	Cell Biology and Cell Biology Laboratory	
or BIOLOGY 323	Principles of Microbiology	
BIOLOGY 303	Genetics	
BIOLOGY 309	Evolutionary Biology	
BIOLOGY 311	Plant Physiology	
or BIOLOGY 346	Comparative Physiology	
ENV SCI 302	Principles of Ecology	

Choose 12-14 credits of the follo	owing areas:	
Animal Biology (minimum of one course):		
BIOLOGY 304	Genetics Laboratory	
BIOLOGY 340	Comparative Anatomy of Vertebrates	
BIOLOGY 342	Ornithology	
BIOLOGY 343	Mammalogy	
BIOLOGY 345	Animal Behavior	
BIOLOGY 346	Comparative Physiology	
BIOLOGY 353	Invertebrate Biology	
BIOLOGY 355	Entomology	
BIOLOGY 365	Aquatic Invertebrates	
BIOLOGY 410	Developmental Biology	
BIOLOGY 411	Developmental Biology Laboratory	
Ecology and Conservation Biole	ogy (minimum of one course):	
BIOLOGY 310	Plant Biodiversity	
BIOLOGY 320	Field Botany	
BIOLOGY 342	Ornithology	
BIOLOGY 343	Mammalogy	
BIOLOGY 353	Invertebrate Biology	
BIOLOGY 355	Entomology	
ENV SCI 467	Capstone in Environmental Science	
ENV SCI 469	Conservation Biology	
ENV SCI 499	Travel Course	
Cell/Molecular Biology (minimu	m of one course):	
BIOLOGY 304	Genetics Laboratory	
BIOLOGY 307	Cell Biology	
BIOLOGY 312	Mycology	
BIOLOGY 323	Principles of Microbiology	
BIOLOGY 402	Advanced Microbiology	
BIOLOGY 407	Molecular Biology	
BIOLOGY 408	Molecular Biology Laboratory	
CHEM 330	Biochemistry	
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	

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¹ Satisfied with an ACT English score of 32 or higher

Cell/Molecular

Code Supporting Courses	Title	Credits 28-29
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	
CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	

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MATH 260	Introductory Statistics	
Mathematics (choose one c		
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Writing (choose one course		
INFO SCI 390	Technical Writing	
WF 105	Research and Rhetoric	00.00
Upper Level Courses		30-33
Required courses		
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 323 & BIOLOGY 324	Principles of Microbiology and Principles of Microbiology Laboratory	
BIOLOGY 407	Molecular Biology	
ENV SCI 302	Principles of Ecology	
Minimum of 4 credits of the	following courses:	
CHEM 300 & CHEM 301	Bio-Organic Chemistry and Bio-Organic Chemistry Laboratory	
CHEM 302 & CHEM 304	Organic Chemistry I and Organic Chemistry Laboratory I	
Choose a minimum of 5 cre	edits 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	
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

¹ Satisfied with an ACT English score of 32 or higher

Ecology and Conservation

Code	Title	Credits
Supporting Courses		25-29
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	

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CHEM 211	Principles of Chemistry I	
& CHEM 213	and Principles of Chemistry I Laboratory	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	
MATH 260	Introductory Statistics	
Mathematics (choose one cours	se):	
COMP SCI 256	Introduction to Software Design	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
Writing (choose one course): ¹		
INFO SCI 390	Technical Writing	
WF 105	Research and Rhetoric	
Jpper Level Courses		30-33
Required Courses		
BIOLOGY 303	Genetics	
BIOLOGY 309	Evolutionary Biology	
ENV SCI 302	Principles of Ecology	
ENV SCI 469	Conservation Biology	
Cell or Microbiology (choose or	ne):	
BIOLOGY 307 & BIOLOGY 308	Cell Biology and Cell Biology Laboratory	
BIOLOGY 322	Environmental Microbiology	
BIOLOGY 323	Principles of Microbiology	
& BIOLOGY 324	and Principles of Microbiology Laboratory	
Physiology Course (choose one	e):	
BIOLOGY 311	Plant Physiology	
or BIOLOGY 346	Comparative Physiology	
Choose a minimum of 8 credits	from the following courses:	
BIOLOGY 310	Plant Biodiversity	
BIOLOGY 311	Plant Physiology	
BIOLOGY 312	Мусоlоду	
BIOLOGY 320	Field Botany	
BIOLOGY 322	Environmental Microbiology	
BIOLOGY 342	Ornithology	
BIOLOGY 343	Mammalogy	
BIOLOGY 355	Entomology	
BIOLOGY 365	Aquatic Invertebrates	
ENV SCI 401	Stream Ecology	
BIOLOGY 357	Marine Biology	
BIOLOGY 401	Fish and Wildlife Population Dynamics	
ENV SCI 337	Environmental GIS	
ENV SCI 403	Limnology	
ENV SCI 467	Capstone in Environmental Science	
BIOLOGY 449	Wetland Ecology	
ENV SCI 499	Travel Course	
Seminar, 1 credit required		
BIOLOGY 490	Biology Seminar	

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Satisfied with an ACT English score of 32 or higher

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Ecology and Conservation (Accelerated) - Integrated with graduate Environmental Science & Policy program

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Code	Title	Credits	
Supporting Courses		25-29	
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes		
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution		
CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory		
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory		
MATH 260	Introductory Statistics		
Mathematics (choose one cours	se):		
COMP SCI 256	Introduction to Software Design		
MATH 104	Precalculus		
MATH 202	Calculus and Analytic Geometry I		
Writing (choose one course): ¹			
ENG COMP 105	English Composition II: Composition and Rhetoric		
INFO SCI 390	Technical Writing		
Upper Level Courses		30-33	
Required Courses			
BIOLOGY 303	Genetics		
BIOLOGY 309	Evolutionary Biology		
ENV SCI 302	Principles of Ecology		
ENV SCI 469	Conservation Biology		
Cell or Microbiology (Choose o	ne):		
BIOLOGY 307 & BIOLOGY 308	Cell Biology and Cell Biology Laboratory		
BIOLOGY 322	Environmental Microbiology		
BIOLOGY 323	Principles of Microbiology		
& BIOLOGY 324	and Principles of Microbiology Laboratory		
Physiology Course (choose on	e):		
BIOLOGY 311	Plant Physiology		
or BIOLOGY 346	Comparative Physiology		
Choose a minimum of 8 credits	from the following courses:		
BIOLOGY 310/510	Plant Biodiversity [#]		
BIOLOGY 311/511	Plant Physiology [#]		
BIOLOGY 312/512	Mycology [#]		
BIOLOGY 320/520	Field Botany [#]		
BIOLOGY 322/522	Environmental Microbiology #		
BIOLOGY 342/542	Ornithology #		
BIOLOGY 343/543	Mammalogy [#]		
BIOLOGY 355/555	Entomology #		
BIOLOGY 357/557	Marine Biology [#]		
BIOLOGY 365	Aquatic Invertebrates		
BIOLOGY 401/601	Fish and Wildlife Population Dynamics #		
BIOLOGY 449	Wetland Ecology		
BIOLOGY 450/650	Ecological Restoration #		
ENV SCI 337/537	Environmental GIS [#]		
ENV SCI 401/601	Stream Ecology #		
ENV SCI 403/603	Limnology [#]		

ENV SCI 467	Capstone in Environmental Science	
ENV SCI 499	Travel Course	
Seminar, 1 credit required		
BIOLOGY 490	Biology Seminar	
Total Credits		55-62

Students must be granted permission through the department to enroll in graduate level coursework. For more information, contact the graduate Environmental Science & Policy office or refer to the graduate catalog (http://catalog.uwgb.edu/graduate/general-information/academic-rulesregulations/undergrad-in-accelerated/).

Microbiology

Code	Title	Credits
Supporting Courses		25-29
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	
CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	
MATH 260	Introductory Statistics	
Mathematics (choose one course	se):	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Writing (choose one course): ¹		
INFO SCI 390	Technical Writing	
WF 105	Research and Rhetoric	
Upper Level Courses ²		34-38
Required courses		
BIOLOGY 311	Plant Physiology	
or BIOLOGY 346	Comparative Physiology	
BIOLOGY 303	Genetics	
BIOLOGY 309	Evolutionary Biology	
BIOLOGY 323 & BIOLOGY 324	Principles of Microbiology and Principles of Microbiology Laboratory	
or BIOLOGY 322	Environmental Microbiology	
ENV SCI 302	Principles of Ecology	
BIOLOGY 402	Advanced Microbiology	
Chemistry (minimum of 8 credit	ts of the following courses):	
CHEM 302 & CHEM 304	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 303 & CHEM 305	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 330	Biochemistry	
CHEM 331	Biochemistry Laboratory	
Electives (choose 8 or more cre	edits from the following courses):	
BIOLOGY 307	Cell Biology	
BIOLOGY 308	Cell Biology Laboratory	
BIOLOGY 312	Mycology	
BIOLOGY 407	Molecular Biology	
BIOLOGY 408	Molecular Biology Laboratory	

٦	Cotal Credits		50-67
	BIOLOGY 490	Biology Seminar	
	Seminar (1 credit required):		
	HUM BIOL 423	Immunology Lab	
	HUM BIOL 422	Immunology	
	BIOLOGY 497	Internship	

¹ Satisfied with an ACT English score of 32 or higher

Research experience and/or Internships are highly recommended. Credits from research and internships may be counted toward upper level electives.

Students planning to continue on to graduate school or a professional program are recommended to take calculus, physics and organic chemistry.

Pre-Veterinary

Code	Title	Credits
Supporting Courses		24-27
BIOLOGY 201 & BIOLOGY 202	Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes	
BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms, Ecology, and Evolution and Principles of Biology Lab: Organisms, Ecology, and Evolution	
CHEM 211 & CHEM 213	Principles of Chemistry I and Principles of Chemistry I Laboratory	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	
MATH 260	Introductory Statistics	
Mathemetics (choose one cours	se):	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Writing (choose one course): ¹		
ENG COMP 105	English Composition II: Composition and Rhetoric	
Upper Level Courses		47
BIOLOGY 303	Genetics	
BIOLOGY 309	Evolutionary Biology	
ENV SCI 302	Principles of Ecology	
BIOLOGY 346	Comparative Physiology	
CHEM 302 & CHEM 304	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 303 & CHEM 305	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 330	Biochemistry	
Cell Biology (choose one of the	following options):	
BIOLOGY 307 & BIOLOGY 308	Cell Biology and Cell Biology Laboratory	
BIOLOGY 323 & BIOLOGY 324	Principles of Microbiology and Principles of Microbiology Laboratory	
Physics (choose one of the follo		
PHYSICS 103	Fundamentals of Physics I	
& PHYSICS 104	and Fundamentals of Physics II	
PHYSICS 201	Principles of Physics I	
& PHYSICS 202	and Principles of Physics II	
Choose a minimum of 8 credits	from the following courses:	
BIOLOGY 304	Genetics Laboratory	

12 Biology Major

BIOLOGY 340	Comparative Anatomy of Vertebrates	
BIOLOGY 342	Ornithology	
BIOLOGY 343	Mammalogy	
BIOLOGY 345	Animal Behavior	
BIOLOGY 411	Developmental Biology Laboratory	
HUM BIOL 422	Immunology	
HUM BIOL 423	Immunology Lab	
Seminar, 1 credit required		
BIOLOGY 490	Biology Seminar	
Total Credits		71-74

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Satisfied with an ACT English score of 32 or higher