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
- Aquatic Ecology and Fisheries Emphasis
- Cell/Molecular
- Ecology and Conservation
 - Ecology and Conservation (Accelerated) Integrated with graduate Environmental Science & Policy Program
- Microbiology
- Pre-Veterinary

Animal Biology

Code	Title	Credits
Supporting Courses		25-26
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 and Evolution and Principles of Biology Lab: Organisms 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	e):	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Upper-Level Courses		30-33
Required courses		
BIOLOGY 303	Genetics	
BIOLOGY 306	Principles of Ecology	
BIOLOGY 309	Evolutionary Biology	
BIOLOGY 311	Plant Physiology	
or BIOLOGY 346	Comparative Physiology	
Cell or Microbiology (choose on	e):	
BIOLOGY 307 & BIOLOGY 308	Cell Biology and Cell Biology Laboratory	
BIOLOGY 323 & BIOLOGY 324	Principles of Microbiology and Principles of Microbiology Laboratory	
BIOLOGY 322	Environmental Microbiology	
HUM BIOL 323 & HUM BIOL 326	Medical Microbiology and Medical Microbiology Lab	
Choose 12-14 credits from the fo	bllowing 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 490	Biology Seminar	
Seminar, 1 credit required		
HUM BIOL 444	Endocrinology	
HUM BIOL 423	Immunology Lab	
HUM BIOL 422	Immunology	
HUM BIOL 413	Neurobiology	
HUM BIOL 403	Human Physiology Laboratory	
HUM BIOL 402	Human Physiology	
ENV SCI 403	Limnology	
ENV SCI 401	Stream Ecology	
ENV SCI 337	Environmental GIS	
BIOLOGY 450	Ecological Restoration	
BIOLOGY 449	Wetland Ecology	
BIOLOGY 411	Developmental Biology Laboratory	
BIOLOGY 410		
BIOLOGY 300	Aqualic Inventebrates	
BIOLOGY 357		
BIOLOGY 355	Entomology Marine Biology	
BIOLOGY 346	Comparative Physiology	
BIOLOGY 345	Animal Behavior	
BIOLOGY 343	Mammalogy	
BIOLOGY 342	Ornithology	

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

Code	Title	Credits
Supporting Courses		25-26
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 and Evolution and Principles of Biology Lab: Organisms 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	e):	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
ENV SCI 336	Environmental Statistics	
ENV SCI 337	Environmental GIS	
Upper-Level Courses		30-33
Required courses		
BIOLOGY 303	Genetics	
BIOLOGY 306	Principles of Ecology	
BIOLOGY 309	Evolutionary Biology	
BIOLOGY 311/511	Plant Physiology [#]	
or BIOLOGY 346	Comparative Physiology	
Cell or Microbiology (choose on	e):	

BIOLOGY 307 & BIOLOGY 308	Cell Biology and Cell Biology Laboratory
BIOLOGY 323 & BIOLOGY 324	Principles of Microbiology and Principles of Microbiology Laboratory
BIOLOGY 322/522	Environmental Microbiology #
HUM BIOL 323 & HUM BIOL 326	Medical Microbiology and Medical Microbiology Lab
Choose 12-14 credits from the fo	ollowing 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 365/565	Aquatic Invertebrates
BIOLOGY 401/601	Fish and Wildlife Population Dynamics #
BIOLOGY 410	Developmental Biology
BIOLOGY 411	Developmental Biology Laboratory
BIOLOGY 449/649	Wetland Ecology
BIOLOGY 450/650	Ecological Restoration
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-rules-regulations/undergrad-in-accelerated/).

Aquatic Ecology and Fisheries

Code	Title	Credits
Supporting Courses		25-26
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 and Evolution and Principles of Biology Lab: Organisms and Evolution	
CHEM 207	Laboratory Safety	

Total Credits		62-63
BIOLOGY 490	Biology Seminar	
Seminar		1
BIOLOGY 401	Fish and Wildlife Population Dynamics	
BIOLOGY 370	Fisheries Research and Management	
Choose one of the following co	urses:	
ENV SCI 403	Limnology	
ENV SCI 401	Stream Ecology	
Choose one of the following co	urses:	
BIOLOGY 365	Aquatic Invertebrates	
BIOLOGY 360	Early Life History of Fish	
BIOLOGY 341	Ichthyology	
Choose one of the following co	urses:	
BIOLOGY 449	Wetland Ecology	
BIOLOGY 346	Comparative Physiology	
BIOLOGY 322	Environmental Microbiology	
BIOLOGY 309	Evolutionary Biology	
BIOLOGY 306	Principles of Ecology	
BIOLOGY 303	Genetics	
Required Courses		
Upper Level Courses		36
ENV SCI 337	Environmental GIS	
ENV SCI 336	Environmental Statistics	
MATH 202	Calculus and Analytic Geometry I	
MATH 104	Precalculus	
Mathematics (choose one cours	se):	
MATH 260	Introductory Statistics	
CHEM 212 & CHEM 214	Principles of Chemistry II and Principles of Chemistry II Laboratory	
& CHEM 213	and Principles of Chemistry I Laboratory	
CHEM 211	Principles of Chemistry I	

Cell/Molecular

Code	Title	Credits
Supporting Courses		25-26
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 and Evolution and Principles of Biology Lab: Organisms 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	
Upper-Level Courses		34-35
Required courses		
BIOLOGY 303	Genetics	
BIOLOGY 306	Principles of Ecology	

BIOLOGY 308 Cell Biology Laboratory BIOLOGY 309 Evolutionary Biology BIOLOGY 301 Plant Physiology BIOLOGY 346 Comparative Physiology BIOLOGY 347 Molecular Biology BIOLOGY 348 Comparative Physiology BIOLOGY 343 Principles of Microbiology Laboratory BIOLOGY 323 Principles of Microbiology Laboratory HUM BIOL 323 Medical Microbiology Laboratory HUM BIOL 326 and Principles of Microbiology Laboratory HUM BIOL 326 and Medical Microbiology Laboratory HUM BIOL 326 and Medical Microbiology Laboratory HUM BIOL 326 and Medical Microbiology Laboratory CHEM 300 Bio-Organic Chemistry Laboratory A CHEM 301 and Organic Chemistry Laboratory I CHEM 302 Organic Chemistry Laboratory I BIOLOGY 322 Environmental Microbiology Laboratory I BIOLOGY 323 Molecular Biology S BIOLOGY 324 Advanced Microbiology S BIOLOGY 325 Environmental Microbiology Laboratory BIOLOGY 402 Advanced Microbiology Laboratory BIOLOGY 402	BIOLOGY 307	Cell Biology
BIOLOGY 309Evolutionary BiologyBIOLOGY 311Plant Physiologyor BIOLOGY 346Comparative PhysiologyBIOLOGY 407Molecular Biology Microbiology (Choose one) Principles of Microbiology LaboratoryBIOLOGY 323Principles of Microbiology LaboratoryHUM BIOL 323Medical Microbiology LaboratoryHUM BIOL 323Medical Microbiology LaboratoryK HUM BIOL 323Medical Microbiology LaboratoryK HUM BIOL 324and Principles of Microbiology LaboratoryK HUM BIOL 325and Medical Microbiology LaboratoryK HUM BIOL 326and Bio-Organic Chemistry LaboratoryC HEM 300Bio-Organic Chemistry LaboratoryC HEM 301and Bio-Organic Chemistry LaboratoryC HEM 302Organic Chemistry Laboratory 1C HOose a minimum of 5 credits LaboratoryBIOLOGY 322Environmental MicrobiologyBIOLOGY 324MycologyBIOLOGY 325Environmental MicrobiologyBIOLOGY 408Molecular BiologyBIOLOGY 408Molecular BiologyBIOLOGY 411Developmental BiologyBIOLOGY 411Developmental BiologyBIOLOGY 422ImmunologyHUM BIOL 423Biochemistry LaboratoryC HEM 331Biochemistry LaboratoryHUM BIOL 424Immunology LaboratoryHUM BIOL 424Immunology LaboratoryHUM BIOL 424Immunology LaboratoryHUM BIOL 424Immunology LaboratoryBIOLOGY 409Biology Seminar	BIOLOGY 308	Cell Biology Laboratory
BIOLOGY 311Plant Physiologyor BIOLOGY 326Comparative PhysiologyBIOLOGY 327Molecular BiologyMicrobiology (Choose one)Principles of Microbiology Laboratory& BIOLOGY 323Principles of Microbiology LaboratoryHUM BIOL 323Medical Microbiology LaboratoryHUM BIOL 323Medical Microbiology LaboratoryHUM BIOL 323Medical Microbiology LaboratoryCHEM 300and Perioripe correse:CHEM 301Bio-Organic Chemistry LaboratoryCHEM 302Organic Chemistry LaboratoryCHEM 303Greatic Chemistry Laboratory ICHEM 304Genetics Laboratory ICHOSY 324Mologanic Chemistry Laboratory ICHEM 305Genetics Laboratory IBIOLOGY 304Genetics Laboratory IBIOLOGY 305Environmental MicrobiologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 403Soclear MicrobiologyBIOLOGY 403Molecular Biology LaboratoryBIOLOGY 404Molecular Biology LaboratoryBIOLOGY 405Biochemistry LaboratoryBIOLOGY 405Biochemistry Chemistry LaboratoryBIOLOGY 405Biochemistry LaboratoryBIOLOGY 406Molecular Biology LaboratoryBIOLOGY 407Biochemistry LaboratoryHUM BIOL 422Biochemistry LaboratoryHUM BIOL 423Inmunology LaboratoryHUM BIOL 424Immunology LaboratoryHUM BIOL 424Immunology LaboratoryHUM BIOL 424Immunology LaboratoryHUM BIOL 4240Immunology Laboratory <tr< td=""><td>BIOLOGY 309</td><td>Evolutionary Biology</td></tr<>	BIOLOGY 309	Evolutionary Biology
or BlOLOGY 346Comparative PhysiologyBlOLOGY 407Molecular BiologyBlOLOGY 407Molecular BiologyBlOLOGY 320Principles of Microbiology Laboratory& BlOLOGY 323Medical Microbiology LaboratoryHUM BlOL 323Medical Microbiology LaboratoryHUM BlOL 323Medical Microbiology LaboratoryMINUMOR 4 credits of the Crobine StrySchem Stry& CHEM 300Silo-Organic Chemistry& CHEM 301Silo-Organic Chemistry Laboratory& CHEM 302Organic Chemistry Laboratory 1& CHEM 304Genetics Laboratory 1BIOLOGY 305Miceular BiologyBIOLOGY 406Molecular Biology Laboratory 1BIOLOGY 407Molecular Biology Laboratory 1BIOLOGY 408Biolemistry Laboratory 1BIOLOGY 409Miceular Biology Laboratory 1BIOLOGY 400Silo Chemistry Laboratory 1BIOLOGY 401Biolemistry Laboratory 1BIOLOGY 402Miceular Biology Laboratory 1BIOLOGY 403Biolemistry Laboratory 1BIOLOGY 404Biolemistry Laboratory 1BIOLOGY 405Biology Laboratory 1BIOLOGY 406Miceular Biology Laboratory 1BIOLOGY 407Biolemistry Laboratory 1BIOLOGY 408Biolemistry Laboratory 1BIOLOGY 409Biology Laboratory 1BIOLOGY 400Biology Laboratory 1BIOLO	BIOLOGY 311	Plant Physiology
BIOLOGY 407 Molecular Biology Microbiology (Choose one) Principles of Microbiology BIOLOGY 323 Principles of Microbiology Laboratory HUM BIOL 323 Medical Microbiology Laboratory HUM BIOL 323 and Medical Microbiology Laboratory Minimum of 4 credits of the following courses: Enclosed and Medical Microbiology Laboratory CHEM 300 Bio-Organic Chemistry Laboratory CHEM 301 and Organic Chemistry Laboratory I ChEM 302 Organic Chemistry Laboratory I ChEM 304 and Organic Chemistry Laboratory I BIOLOGY 312 Mycology BIOLOGY 322 Environmental Microbiology Laboratory BIOLOGY 322 Environmental Microbiology BIOLOGY 322 Environmental Microbiology BIOLOGY 402 Advanced Microbiology BIOLOGY 402 Advanced Microbiology Laboratory BIOLOGY 403 Biolecular Biology Laboratory BIOLOGY 404 Molecular Biology Laboratory BIOLOGY 405 Biochemistry BIOLOGY 406 Biochemistry CHEM 331 Biochemistry Laboratory HUM BIOL 422 <	or BIOLOGY 346	Comparative Physiology
BioLoGY 323Principles of Microbiology Laboratory& BioLoGY 323and Principles of Microbiology Laboratory& HUM BIOL 323Medical Microbiology Laboratory& HUM BIOL 326and Medical Microbiology Laboratory Minum of 4 credits of the TUT curse: Image: Chemistry Curse:CHEM 300Bio-Organic Chemistry Laboratory& CHEM 301organic Chemistry Laboratory I& CHEM 302Organic Chemistry Laboratory I& CHEM 304Gradit Chemistry Laboratory IBIOLOGY 324Micourganic Chemistry Laboratory IBIOLOGY 304Genetics Laboratory IBIOLOGY 305Environmental MicrobiologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 403Micourganic Chemistry IBIOLOGY 404Micourganic Chemistry IBIOLOGY 405Micourganic Chemistry IBIOLOGY 405Micourganic Chemistry IBIOLOGY 406Micourganic Chemistry IBIOLOGY 407Micourganic Chemistry IBIOLOGY 408Micourganic Chemistry IBIOLOGY 409Micourganic Chemistry IBIOLOGY 400DiversetoreBIOLOGY 401DiversetoreBIOLOGY 402Micourganic Chemistry IHIM BIOL 422Immunology LaboratoryHIM BIOL 423Immunology LaboratoryHIM BIOL 424Immunology LaboratoryHIM BIOL 425Biology Caelogy IHIM BIOL 426Biology LaboratoryHIM BIOL 427Biology LaboratoryHIM BIOL 428Biology LaboratoryHIM BIOL 429 <td< td=""><td>BIOLOGY 407</td><td>Molecular Biology</td></td<>	BIOLOGY 407	Molecular Biology
BIOLOGY 323Principles of Microbiology Laboratory& BIOLOGY 324and Principles of Microbiology LaboratoryHUM BIOL 323Medical Microbiology Lab& HUM BIOL 326and Medical Microbiology LabMinimu of 4 credits of the 5000000000000000000000000000000000000	Microbiology (Choose one)	
HUM BIOL 323Medical Microbiology LabA HUM BIOL 326and Medical Microbiology LabMinium of 4 credits of the JUUR correse:CHEM 300Bio-Organic Chemistry& CHEM 301and Bio-Organic Chemistry LaboratoryCHEM 302Organic Chemistry Laboratory I& CHEM 304and Organic Chemistry Laboratory IChoose a minium of 5 credit:The following courses:BIOLOGY 304Genetics LaboratoryBIOLOGY 322Environmental MicrobiologyBIOLOGY 402MycologyBIOLOGY 403Developmental Biology LaboratoryBIOLOGY 410Developmental Biology LaboratoryBIOLOGY 411Developmental Biology LaboratoryCHEM 330Biochemistry LaboratoryCHEM 331Biochemistry LaboratoryHUM BIOL 422Immunology LaboratoryHUM BIOL 423Immunology LaboratoryHUM BIOL 424Immunology LaboratoryHUM BIOL 424Biology SeminarBIOLOGY 400Biology Seminar	BIOLOGY 323 & BIOLOGY 324	Principles of Microbiology and Principles of Microbiology Laboratory
Minimum of 4 credits of the following 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 Chose a minimum of 5 credits romental biology courses: BIOLOGY 304 Genetics Laboratory BIOLOGY 312 Mycology BIOLOGY 322 Environmental Microbiology BIOLOGY 402 Advanced Microbiology BIOLOGY 410 Developmental Biology Laboratory BIOLOGY 411 Developmental Biology Laboratory CHEM 330 Biochemistry Laboratory CHEM 331 Biochemistry Laboratory HUM BIOL 422 Immunology HUM BIOL 423 Immunology HUM BIOL 424 Indexinatory HUM BIOL 424 Indexinatory BIOLOGY 490 Biology Seminar	HUM BIOL 323 & HUM BIOL 326	Medical Microbiology and Medical Microbiology Lab
CHEM 300Bio-Organic Chemistry and Bio-Organic Chemistry Laboratory& CHEM 301and Bio-Organic Chemistry LaboratoryCHEM 302Organic Chemistry Laboratory I& CHEM 304and Organic Chemistry Laboratory IChoose a minimum of 5 credits trom the following courses:BIOLOGY 304Genetics LaboratoryBIOLOGY 312MycologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 410Developmental Biology LaboratoryBIOLOGY 411Developmental Biology LaboratoryCHEM 330Biochemistry LaboratoryCHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 424Endorinougy LabBIOLOGY 490Biology Seminar	Minimum of 4 credits of the follo	owing courses:
CHEM 302 & CHEM 304Organic Chemistry Laboratory IA CHEM 304and Organic Chemistry Laboratory IChoose a minimum of 5 creditsTwo the following courses:BIOLOGY 304Genetics LaboratoryBIOLOGY 312MycologyBIOLOGY 322Environmental MicrobiologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 403Molecular Biology LaboratoryBIOLOGY 410Developmental Biology LaboratoryBIOLOGY 411Developmental Biology LaboratoryCHEM 330Biochemistry LaboratoryCHEM 331Biochemistry LaboratoryHUM BIOL 422Immunology LabHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologyBIOLOGY 490Biology Seminar	CHEM 300 & CHEM 301	Bio-Organic Chemistry and Bio-Organic Chemistry Laboratory
Choose a minimum of 5 credits trom the following courses:BIOLOGY 304Genetics LaboratoryBIOLOGY 312MycologyBIOLOGY 322Environmental MicrobiologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 408Molecular Biology LaboratoryBIOLOGY 410Developmental BiologyBIOLOGY 411Developmental Biology LaboratoryBIOLOGY 412BiochemistryCHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422Immunology LabHUM BIOL 423Immunology LabHUM BIOL 424EndocrinologyBIOLOGY 490Biology Seminar	CHEM 302 & CHEM 304	Organic Chemistry I and Organic Chemistry Laboratory I
BIOLOGY 304Genetics LaboratoryBIOLOGY 312MycologyBIOLOGY 322Environmental MicrobiologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 408Molecular Biology LaboratoryBIOLOGY 410Developmental BiologyBIOLOGY 411Developmental Biology LaboratoryCHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologyBIOLOGY 490Biology Seminar	Choose a minimum of 5 credits	from the following courses:
BIOLOGY 312MycologyBIOLOGY 322Environmental MicrobiologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 408Molecular Biology LaboratoryBIOLOGY 410Developmental Biology LaboratoryBIOLOGY 411Developmental Biology LaboratoryCHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422Immunology LabHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologyBIOLOGY 490Biology Seminar	BIOLOGY 304	Genetics Laboratory
BIOLOGY 322Environmental MicrobiologyBIOLOGY 402Advanced MicrobiologyBIOLOGY 408Molecular Biology LaboratoryBIOLOGY 410Developmental BiologyBIOLOGY 411Developmental Biology LaboratoryCHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologyBIOLOGY 490Biology Seminar	BIOLOGY 312	Mycology
BIOLOGY 402Advanced MicrobiologyBIOLOGY 408Molecular Biology LaboratoryBIOLOGY 410Developmental Biology LaboratoryBIOLOGY 411Developmental Biology LaboratoryCHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologyBIOLOGY 490Biology Seminar	BIOLOGY 322	Environmental Microbiology
BIOLOGY 408Molecular Biology LaboratoryBIOLOGY 410Developmental BiologyBIOLOGY 411Developmental Biology LaboratoryCHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologyBIOLOGY 490Biology Seminar	BIOLOGY 402	Advanced Microbiology
BIOLOGY 410Developmental BiologyBIOLOGY 411Developmental Biology LaboratoryCHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologyBIOLOGY 490Biology Seminar	BIOLOGY 408	Molecular Biology Laboratory
BIOLOGY 411Developmental Biology LaboratoryCHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologySeminar, 1 credit requiredBIOLOGY 490Biology Seminar	BIOLOGY 410	Developmental Biology
CHEM 330BiochemistryCHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologySeminar, 1 credit requiredBiology Seminar	BIOLOGY 411	Developmental Biology Laboratory
CHEM 331Biochemistry LaboratoryHUM BIOL 422ImmunologyHUM BIOL 423Immunology LabHUM BIOL 444EndocrinologySeminar, 1 credit requiredBiology Seminar	CHEM 330	Biochemistry
HUM BIOL 422 Immunology HUM BIOL 423 Immunology Lab HUM BIOL 444 Endocrinology Seminar, 1 credit required Biology Seminar	CHEM 331	Biochemistry Laboratory
HUM BIOL 423 Immunology Lab HUM BIOL 444 Endocrinology Seminar, 1 credit required Biology Seminar	HUM BIOL 422	Immunology
HUM BIOL 444 Endocrinology Seminar, 1 credit required Biology Seminar	HUM BIOL 423	Immunology Lab
Seminar, 1 credit required BIOLOGY 490 Biology Seminar	HUM BIOL 444	Endocrinology
BIOLOGY 490 Biology Seminar	Seminar, 1 credit required	
	BIOLOGY 490	Biology Seminar

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¹ Satisfied with an ACT English score of 32 or higher

Ecology and Conservation

Code	Title	Credits
Supporting Courses		25-26
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 and Evolution and Principles of Biology Lab: Organisms 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	e):	
COMP SCI 256	Introduction to Software Design	
MATH 104	Precalculus	
MATH 202	Calculus and Analytic Geometry I	
Upper-Level Courses		30-31
Required Courses		

Т	otal Credits		55-57
	BIOLOGY 490	Biology Seminar	
	Seminar, 1 credit required		
	ENV SCI 499	Travel Course	
	ENV SCI 467	Capstone in Environmental Science	
	ENV SCI 403	Limnology	
	ENV SCI 401	Stream Ecology	
	ENV SCI 337	Environmental GIS	
	BIOLOGY 450	Ecological Restoration	
	BIOLOGY 449	Wetland Ecology	
	BIOLOGY 401	Fish and Wildlife Population Dynamics	
	BIOLOGY 365	Aquatic Invertebrates	
	BIOLOGY 357	Marine Biology	
	BIOLOGY 355	Entomology	
	BIOLOGY 343	Mammalogy	
	BIOLOGY 342	Ornithology	
	BIOLOGY 322	Environmental Microbiology	
	BIOLOGY 320	Field Botany	
	BIOLOGY 312	Mycology	
	BIOLOGY 311	Plant Physiology	
	BIOLOGY 310	Plant Biodiversity	
	Choose a minimum of 8 credits	from the following courses:	
	or BIOLOGY 346	Comparative Physiology	
	BIOLOGY 311	Plant Physiology	
	Physiology Course (choose one):	
	& HUM BIOL 326	and Medical Microbiology Lab	
	& BIOLOGY 324	and Principles of Microbiology Laboratory	
	BIOLOGY 323	Principles of Microbiology	
	BIOLOGY 322	Environmental Microbiology	
	& BIOLOGY 307 & BIOLOGY 308	cell Biology and Cell Biology Laboratory	
	Cell or Microbiology (choose on		
	BIOLOGY 469	Conservation Biology	
	BIOLOGY 309	Evolutionary Biology	
	BIOLOGY 306	Principles of Ecology	
	BIOLOGY 303	Genetics	

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

Code	Title	Credits
Supporting Courses		25-26
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 and Evolution and Principles of Biology Lab: Organisms 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	
U	pper-Level Courses		30-31
	Required Courses		
	BIOLOGY 303	Genetics	
	BIOLOGY 306	Principles of Ecology	
	BIOLOGY 309	Evolutionary Biology	
	BIOLOGY 469	Conservation Biology	
	Cell or Microbiology (Choose on	e):	
	BIOLOGY 307	Cell Biology	
	& BIOLOGY 308	and Cell Biology Laboratory	
	BIOLOGY 322	Environmental Microbiology	
	BIOLOGY 323	Principles of Microbiology	
	& BIOLOGY 324	and Principles of Microbiology Laboratory	
	HUM BIOL 323	Medical Microbiology	
	& HUM BIOL 320		
	PIQLOCV 211	J. Plant Dhysiology	
	or BIOLOGY 346	Comparative Physiology	
	Choose a minimum of 8 credits t		
	BIOLOGY 210/510	Dant Rindiversity #	
	BIOLOGY 311/511	Plant Divulversity	
	BIOLOGY 312/512	Mycology #	
	BIOLOGY 320/520	Field Botony [#]	
	BIOLOGY 322/522	Environmental Microbiology [#]	
	BIOLOGY 342/542		
	BIOLOGY 343/543	Mammalogy #	
	BIOLOGY 355/555	Entomology [#]	
	BIOLOGY 357/557	Marine Biology #	
	BIOLOGY 365/565	Aquatic Invertebrates #	
	BIOLOGY 401/601	Fish and Wildlife Population Dynamics [#]	
	BIOLOGY 449/649	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	

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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-rules-regulations/undergrad-in-accelerated/).

Microbiology

Code	Title	Credits
Supporting Courses		25-26
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 and Evolution and Principles of Biology Lab: Organisms 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	
Upper-Level Courses ¹		38-39
Required courses		
BIOLOGY 306	Principles of Ecology	
BIOLOGY 311	Plant Physiology	
or BIOLOGY 346	Comparative Physiology	
BIOLOGY 303	Genetics	
BIOLOGY 309	Evolutionary Biology	
BIOLOGY 402	Advanced Microbiology	
Microbiology (Choose one)		
BIOLOGY 323	Principles of Microbiology	
& BIOLOGY 324	and Principles of Microbiology Laboratory	
BIOLOGY 322	Environmental Microbiology	
HUM BIOL 323	Medical Microbiology	
& HUM BIOL 326	and Medical Microbiology Lab	
Chemistry (minimum of 8 credit	s of the following courses):	
& CHEM 302	and Organic Chemistry Laboratory I	
CHEM 303	Organic Chemistry II	
	and Organic Chemistry Laboratory II	
	Biochemistry Laboratory	
	Call Pielogy	
BIOLOGY 312		
BIOLOGY 407	Mycology Molecular Biology	
BIOLOGY 408	Molecular Biology	
BIOLOGY 497		
HUM BIOL 423		
Seminar (1 credit required):	nindrology Lub	
BIOLOGY 490	Biology Seminar	

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¹ 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		34-35
BIOLOGY 201	Principles of Biology: Cellular and Molecular Processes	
& BIOLOGY 202	and Principles of Biology Lab: Cellular and Molecular Processes	

BIOLOGY 203 & BIOLOGY 204	Principles of Biology: Organisms and Evolution and Principles of Biology Lab: Organisms 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 course	se):
MATH 104	Precalculus
MATH 202	Calculus and Analytic Geometry I
ENV SCI 336	Environmental Statistics
ENV SCI 337	Environmental GIS
Physics Lecture (choose one of	f the following options):
PHYSICS 103	Fundamentals of Physics I
& PHYSICS 104	and Fundamentals of Physics II
	Principles of Physics I and Principles of Physics II
Physics Labs	
PHYSICS 203	Introductory Physics Lab L
& PHYSICS 204	and Introductory Physics Lab II
Upper-Level Courses	4
BIOLOGY 303	Genetics
BIOLOGY 306	Principles of Ecology
BIOLOGY 309	Evolutionary Biology
BIOLOGY 346	Comparative Physiology
CHEM 302	Organic Chemistry I
& CHEM 304	and Organic Chemistry Laboratory I
CHEM 303	Organic Chemistry II
	Biochomistry Laboratory II
Coll Biology (choose one of the	following options):
BIOLOGY 307	Cell Biology
& BIOLOGY 308	and Cell Biology Laboratory
& BIOLOGY 323 & BIOLOGY 324	and Principles of Microbiology Laboratory
HUM BIOL 323 & HUM BIOL 326	Medical Microbiology and Medical Microbiology Lab
Choose a minimum of 8 credits	from the following courses:
BIOLOGY 304	Genetics Laboratory
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