updated 11/09/2026

SPRING 2027 - Upper-Level Biology Courses for the Biochemistry Major

Click HERE to see full list of options in the Guide (open "Option A (Introductory and Upper-Level Biology)").

COURSE CODE	COURSE TITLE	CREDITS
BIOCHEM 375 Section 001	Deep Learning for Structural Biology	3
BIOCHEM 375 Section 002	Pandemic Viruses	2
BIOCHEM 375 Section 003	Multi-omics and Nutrition	2
BIOCHEM 375 Section 005	Protein Engineering Strategies	1
AGROECOL 377	Global Food Production and Health	3
ANAT&PHY 335	Physiology	5
ANAT&PHY 337	Human Anatomy	3
ANAT&PHY 435	Fundamentals of Human Physiology	5
AN SCI/DY SCI/NUTR SCI 311	Comparative Animal Nutrition	3
AN SCI/DY SCI 320	Animal Health and Disease	3
AN SCI 361	Breeding and Genetics of Livestock and Companion Animals	3
AN SCI 362	Veterinary Genetics	3
AN SCI/FOOD SCI 515	Commercial Meat Processing	2
BIOCHEM/NUTR SCI 510	Nutritional Biochemistry and Metabolism	3
BIOCHEM/NUTR SCI 560	Principles of Human Disease and Biotechnology	2
BIOCHEM/M M & I 575	Biology of Viruses	2
BIOCHEM/GENETICS/MD GENET 620	Eukaryotic Molecular Biology	3
BSE 349	Quantitative Techniques for Biological Systems	3
BSE 364	Engineering Properties of Food and Biological Materials	3
BSE 365	Measurements and Instrumentation for Biological Systems	3

BSE/ENVIR ST 367	Renewable Energy Systems		3
BSE 460	Biorefining: Energy and Products from Renewable Resources		3
BSE 472	Sediment and Bio-Nutrient Engineering and Management		3
B M E 430	Biological Interactions with Materials		3
BOTANY 305	Plant Morphology and Evolution		4
BOTANY/PL PATH 332	Fungi		4
BOTANY 401	Vascular Flora of Wisconsin		4
BOTANY/ANTHRO/ZOOLOGY 410	Evolutionary Biology		3
BOTANY/ZOOLOGY 460	General Ecology		4
BOTANY/ENTOM/ZOOLOGY 473	Plant-Insect Interactions		3
BOTANY/AMER IND/ANTHRO 474	Ethnobotany	3 to 4	
BOTANY 500	Plant Physiology	3 to 4	
BOTANY/ENTOM/PL PATH 505	Plant-Microbe Interactions: Molecular and Ecological Aspects		3
BOTANY/ENVIR ST/F&W ECOL/ZOOLOGY 516	Conservation Biology		3
BOTANY/PL PATH 563	Phylogenetic Analysis of Molecular Data		3
CHEM 575	Advanced Topics in Chemistry (Topics in Chemical Biology)	1 to 4	
CRB 625	Stem Cell Seminar		1
CRB 640	Fundamentals of Stem Cell and Regenerative Biology		3
ENTOM/ZOOLOGY 302	Introduction to Entomology		4
ENTOM 432	Taxonomy and Bionomics of Immature Insects		4
ENTOM/GENETICS/ZOOLOGY 624	Molecular Ecology		3
ENVIR ST/LAND ARC 361	Wetlands Ecology		3
ENVIR ST/POP HLTH 471	Introduction to Environmental Health		3

FOOD SCI 511	Chemistry and Technology of Dairy Products	3
FOOD SCI 514	Integrated Food Functionality	4
FOOD SCI 550	Fermented Foods and Beverages	2
FOOD SCI 611	Chemistry and Technology of Dairy Products	3
F&W ECOL 300	Forest Measurements	4
F&W ECOL 306	Terrestrial Vertebrates: Life History and Ecology	4
F&W ECOL 379	Principles of Wildlife Management	3
F&W ECOL 410	Silviculture: Applied Forest Ecology	3
F&W ECOL/A A E 430	Decision Methods for Natural Resource Managers	3
F&W ECOL/ZOOLOGY 520	Ornithology	3
F&W ECOL/ZOOLOGY 521	Birds of Southern Wisconsin	3
F&W ECOL 655	Animal Population Dynamics	3
GENETICS 466	Principles of Genetics	3
GENETICS 468	General Genetics 2	3
GENETICS 525	Epigenetics	3
GENETICS 545	Genetics Laboratory	2
GENETICS 566	Advanced Genetics	3
MICROBIO 303	Biology of Microorganisms	3
MICROBIO 304	Biology of Microorganisms Laboratory	2
MICROBIO 305	Critical Analyses in Microbiology	1
MICROBIO/BOTANY 335	The Microbiome of Plants, Animals, and Humans	3
MICROBIO 345	Introduction to Disease Biology	3
MICROBIO 357	General Bioinformatics for Microbiologists	3
MICROBIO 450	Diversity, Ecology and Evolution of Microorganisms	3

MICROBIO 470	Microbial Genetics & Molecular Machines	3
MICROBIO/SOIL SCI 523	Soil Microbiology and Biochemistry	3
MICROBIO 526	Physiology of Microorganisms	3
MICROBIO 551	Capstone Research Project in Microbiology	2
NTP/NEURODPT/PSYCH 611	Systems Neuroscience	4
NUTR SCI 332	Human Nutritional Needs	3
NUTR SCI/A A E 350	World Hunger and Malnutrition	3
NUTR SCI 379	Introduction to Epidemiology	3
NUTR SCI 431	Nutrition in the Life Span	3
PLANTSCI 338	Plant Breeding and Biotechnology	3
PLANTSCI 550	Molecular Approaches for Crop Improvement	3
PSYCH 454	Behavioral Neuroscience	3
PSYCH 513	Hormones, Brain, and Behavior	4
SOIL SCI 326	Plant Nutrition Management	3
SOIL SCI/CIV ENGR/M&ENVTOX 631	Toxicants in the Environment: Sources, Distribution, Fate, & Ef	3
ZOOLOGY 300	Invertebrate Biology and Evolution	3
ZOOLOGY 301	Invertebrate Biology and Evolution Lab	2
ZOOLOGY 470	Introduction to Animal Development	3
ZOOLOGY/ENVIR ST 510	Ecology of Fishes	3
ZOOLOGY/ENVIR ST 511	Ecology of Fishes Lab	2
ZOOLOGY 611	Comparative and Evolutionary Physiology	3
ZOOLOGY 612	Comparative Physiology Laboratory	2