

Matrix Planned Biology Courses For 2024 - 2025 (Subject to Change)

Category	Autumn 2024	Winter 2025	Spring 2025
Foundation Courses	BIOL 350 (3) - Foundations in Physiology BIOL 354 (3) - Foundations in Evol & Systematics BIOL 355 (3) - Foundations in Molec Cell Biology	BIOL 350 (3) - Foundations in Physiology BIOL 355 (3) - Foundations in Molec Cell Biology BIOL 356L (3) - Foundations in Ecology	BIOL 350 (3) - Foundations in Physiology BIOL 355 (3) - Foundations in Molec Cell Biology BIOL 354 (3) - Foundations in Evolution BIOL 356L (3) - Foundations in Ecology
Natural History / Biodiversity Course *	BIOL 280 (4) - History of Life BIOL 311L (5) - Biology of Fishes BIOL 441L (5) - Trends in Land Plant Evolution BIOL 439L (5) - Functional Morphology * BIOL 443L (5) - Evolution of Mammals & Ancestors BIOL 452L (5) - Vertebrate Zoology *	BIOL 434L (5) - Invertebrate Zoology BIOL 450L (5) - Vertebrate Paleontology BIOL 453L (5)L - Comp Anatomy of Vertebrates *	BIOL 331 (3) - Landscape Plant Recognition BIOL 434L (5) - Invertebrate Zoology BIOL 444L (5) - Ornithology BIOL 446L (5) - Plant ID & Classification
Molecular Cell Developmental Biology Courses	BIOL 302L (4) - Lab Techniques in Cell& Molec Bio BIOL 400L (4) - Experiments in Molecular Bio. BIOL 401 (4) - Topics in MCD BIOL 405 (3) - Cell & Molecular Biolo of Human Disease BIOL 411 (4) - Developmental Biology BIOL 416 (3) - Molecular Genetics of Plant Dev. BIOL 431 (1) - Biology of Cannabinoids BIOL 464 (2) - Molecular Mechanisms of Cancer Seminar BIOL 466 (3) - Pathobiology of Emerging Diseases	BIOL 302L (4) - Lab Techniques in Cell& Molec Bio BIOL 403 (3) - Knowledge Synthesis in Cell Biology BIOL 405 (3) - Cell & Molecular Biolo of Human Disease BIOL 407 (4) - Molecular Biology of STEM Cells BIOL 411 (4) - Developmental Biology BIOL 436 (3) - Molecular Cell Biology of Protozoan Parasites BIOL 485 (2) - Senior Seminars in MCD	BIOL 302L (4) - Lab Techniques in Cell& Molec Bio BIOL 400L (4) - Experiments in Molecular Bio. BIOL 402L (4) - Functional Genomics BIOL 415 (3) - Evolution and Development BIOL 429 (3) - Organogenesis BIOL 442 (3) - Genetics of Plant Innovations BIOL 485 (2) - Senior Seminars in MCD
Physiology Courses *	BIOL 310 (5)L -Survey of Human Anatomy BIOL 428L (5) - Sensory Processes BIOL 439L (5) - Functional Morphology * BIOL 452L (5) - Vertebrate Zoology * BIOL 461 (3) - Neurobiology BIOL 465 (3) - Comparative Endocrinology	BIOL 421L (5) - Ecol and Evo Phys of Animals BIOL/ESRM 424/478L (5) - Plant Eco-Physiology BIOL 425L (5) - Adv Plant Physiology and Development BIOL 426 (3) - Comparitive Immunology BIOL 427L (5) - Biomechanics BIOL 453L (5) - Comp Anatomy of Vertebrates * BIOL 454 (3) - Molecular Mech. of Somatosensation BIOL 457 (3) - Chemical Communication BIOL 461 (3) - Neurobiology BIOL 465 (3) - Comparative Endocrinology	BIOL 310L (5) -Survey of Human Anatomy BIOL 414 (3) - Animal Physiology - Cellular Aspects BIOL 417 (4) - Reproductive Physiology BIOL 418 (4) - Biological Clocks and Rhythms BIOL 461 (3) - Neurobiology BIOL 467 (3) - Comparative Animal Physiology
Ecology, Evolution, Systematics, and Conservation Courses*	BIOL 315 (3) - Biol. Impacts of Climate Change BIOL/FISH 473/474 (3/2L) - Limnology & Lab BIOL 481L (5) - Experimental Evolutionary Ecology	BIOL 478 (3) - Topics in Sustainable Fisheries	BIOL 315 (3) - Biol. Impacts of Climate Change BIOL 385 (3) - Evolutionary Medicine BIOL 406 (3) - Conservation of Large Vertebrates BIOL 469 (3) - Evolution and Medicine BIOL 476 (4) - Conservation Biology BIOL 480 (4) - <u>Field Biology</u> BIOL 486 (2) - Sr Seminars in Ecology
Counts for all degrees	BIOL 359 (3) - Quantitative Biology		BIOL 305 (3) - Video Storytelling BIOL 359 (3) - Quantitative Biology BIOL 419 (4) - Data Science for Biologists
Special Topics <small>See listserv for how classes will apply</small>		BIOL 496L (5) -Exercise Physiology BIOL 497 (2) - Biology by the Numbers	BIOL 496L (5) -Exercise Physiology

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Physiology Courses *	BIOL 310 (5)L -Survey of Human Anatomy BIOL 404 (3) - Animal Physiology: Cellular Aspects BIOL 428L (5) - Sensory Processes BIOL 439L (5) - Functional Morphology * BIOL 452L (5) - Vertebrate Zoology * BIOL 465 (3) - Comparative Endocrinology	BIOL 421L (5) - Ecol and Evo Phys of Animals BIOL/ESRM 424/478L (5) - Plant Eco-Physiology BIOL 425L (5) - Adv Plant Physiology and Development BIOL 426 (3) - Comparative Immunology BIOL 427L (5) - Biomechanics BIOL 453L (5) - Comp Anatomy of Vertebrates * BIOL 454 (3) - Molecular Mech. of Somatosensation BIOL 457 (3) - Chemical Communication BIOL 461 (3) - Neurobiology BIOL 465 (3) - Comparative Endocrinology	BIOL 310L (5) -Survey of Human Anatomy BIOL 417 (4) - Reproductive Physiology BIOL 418 (4) - Biological Clocks and Rhythms BIOL 461 (3) - Neurobiology BIOL 467 (3) - Comparative Animal Physiology
Ecology, Evolution, Systematics, and Conservation Courses*	BIOL 315 (3) - Biol. Impacts of Climate Change BIOL 423 (3) -Marine Ecological Processes BIOL/FISH 473/474 (3/2L) - Limnology & Lab BIOL 481L (5) - Experimental Evolutionary Ecology	BIOL 447L (5) - Greening the Earth* BIOL 478 (3) - Topics in Sustainable Fisheries	BIOL 315 (3) - Biol. Impacts of Climate Change BIOL 385 (3) - Evolutionary Medicine BIOL 406 (3) - Conservation of Large Vertebrates BIOL 469 (3) - Evolution and Medicine BIOL 472L (5) - Community Ecology BIOL 476 (4) - Conservation Biology BIOL 486 (2) - Sr Seminars in Ecology
Counts for all degrees	BIOL 359 (3) - Quantitative Biology		BIOL 305 (3) - Video Storytelling BIOL 359 (3) - Quantitative Biology BIOL 419 (4) - Data Science for Biologists
Special Topics <small>listserv for how classes will apply</small>	See	BIOL 496L (5) -Exercise Physiology BIOL 497 (2) - Racism in Neuroscience BIOL 497 (2) - Biology by the Numbers	BIOL 496L (5) -Exercise Physiology

* may count for only one area requirement in those options - Natural history or adv electives