

Matrix Planned Biology Courses For 2020 - 2021 (tentative)

Category	Autumn 2020	Winter 2021	Spring 2021
Foundation Courses	BIOL 350 (3) - Foundations in Physiology BIOL 355 (3) - Foundations in Molec Cell Biology <u>BIOL 356</u> (3) - <u>Foundations in Ecology</u>	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 354 (3) - Foundations in Evol & Systematics BIOL 355 (3) - Foundations in Molec Cell Biology
Natural History / Biodiversity Course *	<u>BIOL 311</u> (5) - <u>Biology of Fishes</u> <u>BIOL 434</u> (5) - <u>Invertebrate Zoology</u> <u>BIOL 438</u> (5) - <u>Quant. Approaches to Paleobio</u> <u>BIOL 441</u> (5) - <u>Trends in Land Plant Evolution</u> <u>BIOL 443</u> (5) - <u>Evolution of Mammals & Ancest</u>	<u>BIOL 434</u> (5) - <u>Invertebrate Zoology</u> <u>BIOL 448</u> (5) - <u>Mammalogy</u> <u>BIOL 450</u> (5) - <u>Vertebrate Paleontology</u> <u>BIOL 453</u> (5) - <u>Comp Anatomy of Vertebrates *</u>	BIOL 331 (3) - Landscape Plant Recognition <u>BIOL 433</u> (5) - <u>Marine Ecology</u> <u>BIOL 440</u> (5) - <u>General Mycology</u> <u>BIOL 444</u> (5) - <u>Orinthology</u> <u>BIOL 446</u> (5) - <u>Plant ID & Classification</u> <u>BIOL 452</u> (5) - <u>Vertebrate Biology*</u>
Molecular Cell Developmental Biology Courses	<u>BIOL 302</u> (4) - <u>Lab Techniques in Cell& Molec Bio</u> <u>BIOL 400</u> (4) - <u>Experiments in Molecular Bio</u> BIOL 401 (3) - Advanced Cell Biology BIOL 411 (4) - Developmental Biology BIOL 416 (3) - Development of Plant Genetics BIOL 431 (1) - Cannabinoids, Plant and Human	<u>BIOL 302</u> (4) - <u>Lab Techniques in Cell& Molec Bio</u> BIOL 401 (3) - Advanced Cell Biology BIOL 405 (3) - Cell & Molec Biol of Human Disease <u>BIOL 407</u> (4) - <u>Molecular Cell Biology of Neural Stem Cells</u> BIOL 415 (3) - Evolution and Development BIOL 431 (1) - Cannabinoids, Plant and Human BIOL 459 (3) - Developmental Neurobiology BIOL 464 (2) - Molecular Mechanisms of Cancer Seminar	<u>BIOL 402</u> (4) - <u>Functional Genomics</u> BIOL 405 (3) - Cell & Molec Biol of Human Disease BIOL 410 (2) - Current Topics in Molec. & Cell Biol BIOL 416 (3) - Molec Genetics of Plant Dev BIOL 464 (2) - Molecular Mechanisms of Cancer Seminar BIOL 485 (2) - Senior seminar in MCD
Physiology Courses *	<u>BIOL 310</u> (5) - <u>Survey of Human Anatomy</u> BIOL 404 (3) - Animal Physio:Cellular Aspects BIOL 417 (4) - Reproductive Physio <u>BIOL 427</u> (5) - <u>Biomechanics</u> <u>BIOL 428</u> (4) - <u>Sensory Neurophys and Ecol</u> BIOL 455 (4) - Human Immuno & Patho BIOL 488 (2) - Senior Seminar in Physiology	<u>BIOL/ESRM 424/478</u> (5) - <u>Plant Eco-Physiology</u> <u>BIOL 425</u> (5) - <u>Plant Physiology and Development</u> <u>BIOL 453</u> (5) - <u>Comp Anatomy of Vertebrates *</u> BIOL 455 (4) - Human Immuno & Patho BIOL 457 (3) - Chemical Communication BIOL 460 (3) - Mammalian Physiology BIOL 461 (3) - Neurobiology BIOL 466 (3) - Pathobiology of Emerging Diseases	<u>BIOL 310</u> (5) - <u>Survey of Human Anatomy</u> BIOL 418 (4) - Circadian Rhythms BIOL 421 (4) - Eco & Evo Physio of Animals BIOL 422 (3) - Behavior of Plants <u>BIOL 452</u> (5) - <u>Vertebrate Biology*</u> BIOL 462 (3) - Animal Physiology BIOL 467 (3) - Comparative Animal Physiology
Ecology, Evolution, Systematics, and Conservation Courses	BIOL 315 (3) - Biol. Impacts of Climate Change <u>BIOL/FISH 473/474</u> (3/2) - <u>Limnology & Lab</u> BIOL 486 (1) - Senior Seminar in Ecology	BIOL 408 (4) - Neuroethology BIOL 423 (3) - Marine Ecological Processes BIOL 478 (3) - Topics in Sustainable Fisheries BIOL 483 (1) - Senior Seminar in Paleobiology	BIOL 315 (3) - Biol. Impacts of Climate Change BIOL 385 (3) - Evolutionary Medicine BIOL 469 (3) - Evolution and Medicine <u>BIOL 472</u> (5) - <u>Community Ecology</u> <u>BIOL 476</u> (5) - <u>Conservation Biology</u> <u>BIOL 480</u> (4) - <u>Field Ecology</u> BIOL 489 (2) - Senior Sem in Plant Biology
Counts for all degrees	BIOL 490 (1) - Senior Sem in Fungal Symbiosis	BIOL 359 (3) - Quantitative Biology	BIOL 305 (3) - Video Storytelling BIOL 359 (3) - Quantitative Biology BIOL 492 (3) - Teaching Biology Inclusively
Special Topics		BIOL 497 (4) - Roles for skin cells in sensory perception BIOL 497 (3) - Comparative Immunology BIOL 497 (3) - Conservation of Large Vertebrates	BIOL 497 (3) - Biology by the Numbers BIOL 497 (2) - Uncommon Leaders BIOL 497 (2) - Biology education research BIOL 490 (2) - Plant Organelle Research

5-Mar-21

Underlined courses indicate a lab class

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

Selected Additional Courses For 2020 - 2021 ¹ (tentative)

Category	Autumn 2020	Winter 2021	Spring 2021
Genetics	FISH/BIOL 340 (5) - Genetics & Molecular Ecol GENOME 361 (3) - Fundamentals of Genetics GENOME 371 (5) - Intro Genetics	GENOME 361 (3) - Fundamentals of Genetics	GENOME 361 (3) - Fundamentals of Genetics
Math and Stats	Q SCI 291 (5) - Calculus for Biologists I Q SCI 482 (5) - Stat Infer in Appl Research	Q SCI 291 (5) - Calculus for Biologists Q SCI 292 (5) - Calculus for Biologists II Q SCI 482 (5) - Stat Infer in Appl Research	Q SCI 292 (5) - Calculus for Biologists II
Natural History / Biodiversity Course	ESRM 452 (3) - Field Ornithology ESRM 456 (3) - Biol & Cons of Birds FISH 450 (3) - Salmonid Beh & Life Hist		ESRM 435 (3) - Insect Ecology ESRM 453 (3) - Biology and Conservation of Mammals
General Biology Electives	BH 402 (5) - Ethical Theory MICROM 301/302L (3/2) - Intro to Microbio/Lab	BH 444 (3) - Ethical Implications of Emerging Biotech BH 488 (3) - Global Bioethics	BH 420 (3) -Philosophical Problems in Bioethics BH 421 (5) -History of Eugenics GWSS/ PSYCH 357 (5) - Psychobiology of Women MICROM 301/302L (3/2) - Intro to Microbio/Lab
Molecular Cell Developmental Biology Courses	BIOC 405 (3) - Survey in Biochemistry BIOC 440 (4) - Biochemistry BIOC 446L (4) - Biochemistry Lab GENOME 372 (5) - Genomics and Proteomics IMMUNO 441 (4) - Intro to Immunology MICROM 402L (3) - Fund of Gen Micro Lab MICROM 410 (3) - Fund of Gen Micro	BIOC 405 (3) - Survey in Biochemistry BIOC 406 (3) - Survey in Biochemistry BIOC 441 (4) - Biochemistry GENOME 465 (4) - Adv Human Genetics GENOME 466 (4) - Cancer Genetics MICROM 411L (4) - Bacterial Genetics MICROM 431L (3) - Prok. Recomb DNA Tech MICROM 442 (3) - Medical Bacteriology	BIOC 406 (3) - Survey in Biochemistry BIOC 442 (4) - Biochemistry BIOC 446L (4) - Biochemistry Lab GENOME 373 (5) - Genome Informatics GENOME 475 (3) - Debates in Genetics MICROM 402L (3) - Fund of Gen Micro Lab MICROM 412 (3) - Prokaryotic Diversity MICROM 445 (3) - Medical Virology MICROM 460 (3) - Med. Mycology & Parasitology
Physiology Courses		FISH 324 (3/5L) - Aquatic Physiology and Repro NUTR 405 (3) - Phys Activity in Health and Disease	NUTR 406 (3) - Sports Nutrition
Ecology, Evolution, Systematics, and Conservation Courses	ESRM 250 (5) - Intro to GIS ESRM 350 (5) - Wildlife Biology & Cons. ESRM/ENVIR 362 (5) - Intro to Rest Ecol ESRM 441 (5) - Landscape Ecology ESRM 465 (3) - Econ of Conservation ESRM 470 (5) - Natural Res Policy & Planning FISH 406 (5) - Parasite Ecology GEOG 360 (5) - Principles of GIS Mapping PSYCH 300 (5) - Animal Behavior	ESRM 250 (5) - Intro to GIS ESRM 400 (3) - Natural Resource Conflict Mgmt ESRM 432 (4) - Adv. Remote Sensing ESRM 450 (5) - Wildlife Ecology & Cons. ESRM 457 (3/5) - Fish and Wildlife Toxicology ESRM 458 (5) - Mgmt of Thrt, Endgd, Sens Sp FISH 427 (5) - Tropical Marine Biology FISH 464 (4) - Marine Artic Ecology	ESRM 250 (5) - Intro to GIS ESRM 459 (3) -Wildlife Cons. in NW Ecosystems FISH 330 (5) - Climate Change Imp. on Marine Systems FISH 444 (5) -Conservation Genetics GEOG 360 (5) - Principles of GIS Mapping
Plant Biology	ESRM 325 (3) - Environmental Appl. Of Plants ESRM 415 (5) - Terrestrial Invasion Ecology	ESRM 422 (2) - Plant Microbiology seminar	ESRM 411 (3) - Plant Propagation: Princ. & Practice ESRM 412 (3) - Native Plant Production

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¹ CAUTION - Not all courses here have been approved for all specific degree options. It is the student's responsibility to determine if a course has been approved, if not then a petition must be submitted. Please refer to an advisor for further clarification.