Suspended program	Student interested in?	Recommended re-named program	Explanation	Course highlights	Notes
Animal Biology	How invertebrate and vertebrate animals interact with environment, each other, and evolve.	Ecology, Evolution and Environmental Biology (currently named Ecology)	Take animal courses from large lists in (1) Biological diversity, (2) Biological processes, (3) Ecology & Environmental Biology, (4) Evolution and Systematics, and (5) Scientific methodology	Vertebrate diversity, Insect biology, Biology of fishes, Biol. Of Amphibianss, & Reptiles, Biol. of birds, Biol of Mammals, Animal Physiology, Animal Developmental Biol, Northern ecology, Community Ecology, Plant-Animal interactions, Landscape Ecology	
	Processes that occur within animals, including interactions within cells, between cells, tissues and organs, and responses to external and internal factors.	Integrative Physiology (currently named Physiology & Developmental Biology)	Program emphasizes learning the foundations of physiological principles & their application to the function of organisms, including investigation of physiology across cellular, organ & organism levels and learning how internal & external factors affect physiology.	Courses in Endocrinology, neurophysiology, immunology, cell signaling, toxicology, and environmental physiology	
	Molecular structure and processes of cellular life.	Molecular, Cellular, and Developmental Biology (currently named Molecular Genetics)	Covers range of disciplines: molecular biology, genetics, genomics, bioinformatives, cell biology, microbiology, developmental biology	Eukaryotic cellular biology, Molecular genetics & heredity, foundations of molecular genetics, Organization of complex genomes, Genetic control of Animal Development,	First two years have equivlent undergraduate training in Genetics, Microbiology, and Plants Science. After that students can take courses that emphasize animal systems

Evolutionary Biology	Investigation of organismal diversity, evolutionary relationships, adaptations and genetic variations	Ecology, **Evolution** and Environmental Biology (currently Ecology)	Take courses from following lists (1) Biological diversity, (2) Biological processes, (3) Ecology & Environmental Biology, (4) Evolution and Systematics, and (5) Scientific methodology	Organismal diversity ranging from microbes, to plants, to insects, to dinosaurs, to mammals;	Ecology & evolution are integrated fields. Newly named program appropriately emphasizes that evolution occurs in ecological & environmental context. Course lists provide ample opportunity for students to take evolutionary courses ranging from populations genetics to deep time.
Microbiology	Exploring mico-organisms: what they are and evolutionary hstory; their function, role in ecosystems.	Ecology, Evolution and Environmental Biology (currently named Ecology)	Take courses from following lists (1) Biological diversity, (2) Biological processes, (3) Ecology & Environmental Biology, (4) Evolution and Systematics, and (5) Scientific methodology	Courses deal with microbial processes that influence animals/plant, environmental impact. General Microbiology, Virology, Microbial Physiology, Microbial Ecology, Extreme Microbiology, Environmental Microbiology, Diversity and Evolution of Microbial Life, Applied Microbiology & Biotechnology	Broad Program with lots of approved options: (1) will be taking non-Micriobiology courses (Mechanisms of Evolution, Principles of Ecology) and (2) Opportunity to take more genetic courses on Microbiology
	Emphasis of bacterial function, structure, and biochemistry.	Molecular, Cellular, and Developmental Biology (currently named Molecular Genetics)	Take courses in general microbiology, Microbial laboratory techniques, Environmental Microbiology, Bacterial Structure & virulence factors, Extreme Microbiology, Applied Microbiology & Biotechnology	General Microbiology, Techniques in molecular biology, Bacterial Structure and Virulence Factors, Extreme Microbiology, Environmental Microbiology, Applied Microbiology & Biotechnology, Organization of Simple Genomes, Microbial Physiology, Environmental Microbiology Laboratory	First two years have equivlent undergraduate training in Genetics, Microbiology, and Plants Science. After that students can take courses that emphasize microbiology

Plant Biology	How plants grow and develop, interact with the environment, each other and evolve	Ecology, Evolution and Environmental Biology (currently named Ecology)	Take plant courses in (1) Biological diversity, (2) Biological processes, (3) Ecology & Environmental Biology, (4) Evolution and Systematics, and (5) Scientific methodology	Courses in Fundamentals of Plant Biology, Flowering Plants, Plant community ecology, Plant physiology, Bryology; Paleobotany, Biodiversity & Function of Algae	Broad program with lots of options. As such, there is ability to "broaden" concept of plants and include Conservation Biology, Landscape Ecology,
	How plants grow, development, and respond to external and internal factors	Integrative Physiology (currently named Physiology & Developmental Biology)	Take courses in animal physiology as well as plant biology. Program emphasizes learning the foundations of physiological principles & their application to the function of organisms.	Courses in Fundamentals of Plant Biology, Plant physiology,	***This program is currently animal heavy, so students would be required to take a substantive number of animal courses.*** Note - Plant physiology and development courses are options in both Ecology, Evolutionary and Environmental Biology & Molecular, Cellular & Developmental Biology
	Molecular plant genetics, including physical, chemical, and molecular processes that occures in and between cells.	Molecular, Cellular, and Developmental Biology (currently named Molecular Genetics)	Take courses in molecular biology, genetics, genomics, cell biology, developmental biology, microbiology, and molecular plant sciences.	Fundamentals of plant biology, techniques in molecular biology, molecular plant physiology, plant funcational genomics, plant anatomy, plant physiology, druge plants, plant genetics.	First two years have equivlent undergraduate training in Genetics, Microbiology, and Plants Science. After that students can emphasize microbiology