

Curriculum Map of the Department of Biological Sciences

	Biological Level of Organization (and applicable courses)					
Outcomes	<u>General/Intro</u> BIOL 111 Gen Biology I and BIOL 112 Gen Biology II	<u>Genetics</u> BIOL 300 Genetics or BIOL 301 Genome Biology	<u>Cellular</u> BIOL 305 Cell Biology or BIOL 306 General Microbiology	<u>Systems</u> BIOL 203 Hum Physiology or BIOL 320 Hum & Comp Physiology or BIOL 341 Neuroscience	<u>Organismal</u> BIOL 220 Hum & Comp Anatomy or BIOL 230 Invertebrate Bio or BIOL 312 Plant Adaptation	<u>Population/Community</u> BIOL 208 Nat Hist Great Lakes or BIOL 213 Interaction in Environment or BIOL 318 Ecology or BIOL 333 Evolution
Explain how the structure and replication of genetic material manifests the flow of information in context of storage, expression and inheritance.	X	X				
Explain cellular structure and function, metabolic processes, gene expression and the differences between prokaryotic and eukaryotic cells.	X		X			
Explain how organ systems maintain homeostasis and apply feedback principles to physiological regulation.	X			X		

Outcomes	<u>General/Intro</u> BIOL 111 Gen Biology I and BIOL 112 Gen Biology II	<u>Genetics</u> BIOL 300 Genetics or BIOL 301 Genome Biology	<u>Cellular</u> BIOL 305 Cell Biology or BIOL 306 General Microbiology	<u>Systems</u> BIOL 203 Hum Physiology or BIOL 320 Hum & Comp Physiology or BIOL 341 Neuroscience	<u>Organismal</u> BIOL 220 Hum & Comp Anatomy or BIOL 230 Invertebrate Bio or BIOL 312 Plant Adaptation	<u>Population/Community</u> BIOL 208 Nat Hist Great Lakes or BIOL 213 Interaction in Environment or BIOL 318 Ecology or BIOL 333 Evolution
Explain the distinguishing characteristics of major lineages as defined by their organismal structures and corresponding functions, development and evolution.	X				X	
Explain how populations evolve as a result of interactions with their living and non-living environment.	X					X
Find, interpret and use appropriate literature for scientific writing and research.	X	X				X
Generate logical interpretations and conclusions from graphs, models, and data of scientific research.	X	X				X