

	BIOL-210	BIOL-211	BIOL-215	BIOL-220	BIOL-223	BIOL-240	BIOL-245	BIOL-250	BIOL-255	BIOL-260	BIOL-282	BIOL-310	BIOL-340	BIOL-350	BIOL-362	CHEM-341	CHEM-342
	Human Parasitology	Cell Biology	Biochemistry of the Cell	Genetics	Virology	Zoology	Ecology	Vertebrate Endocrinology	Reproductive Physiology	Anatomy and Physiology	Dynamics of Biological Systems	Microbiology	Evolution	Immunology	Animal Physiology	Biochemistry I	Biochemistry II
Topic Area	Fall	Winter 2016	Winter 2016	Fall	Winter 2016	Winter 2016	Varies	Fall	Fall	Fall	Winter 2016	Winter 2016	Winter 2016	Fall	Winter 2016	Fall	Winter 2016
<b>Concept 1: Biomolecules have unique properties that determine how they contribute to the structure and function of cells and how they participate in the processes necessary to maintain life.</b>																	
1a. Structure and function of proteins and amino acids	Heavily	Heavily	Heavily	Moderately	Moderately			Moderately	Moderately	Lightly		Heavily	Lightly	Heavily	Lightly	Heavily	Heavily
1b. Transmission of genetic information from the gene to the protein	Moderately	Moderately	Lightly	Heavily	Heavily			Lightly	Lightly			Heavily	Moderately	Heavily	Lightly	Lightly	Heavily
1c. Transmission of heritable information from generation to generation and the processes that increase genetic diversity			Lightly	Heavily	Heavily	Lightly	Lightly		Moderately			Moderately	Heavily	Heavily			Moderately
1d. Principles of bioenergetics and fuel molecule metabolism	Lightly	Moderately	Moderately	Lightly		Lightly	as needed	Moderately		Lightly		Heavily	as needed	Moderately	Moderately	Heavily	Moderately
<b>Concept 2: Highly-organized assemblies of molecules, cells, and organs interact to carry out the functions of living organisms.</b>																	
2a. Assemblies of molecules, cells and groups of cells within single cellular and multicellular organisms	Moderately	Moderately	Moderately	Lightly	Heavily	Lightly		Moderately	Lightly	Moderately	Lightly	Heavily	Lightly	Heavily	Moderately	Heavily	Moderately
2b. The structure, growth, physiology and genetics of prokaryotes and viruses				Lightly	Heavily	Lightly			Lightly		Lightly	Heavily	Lightly				Lightly
2c. Processes of cell division, differentiation and specialization	Lightly	Heavily	Lightly	Moderately	Moderately	Lightly			Moderately			Heavily	Lightly	Heavily			Lightly
<b>Concept 3: Complex systems of tissues and organs sense the internal and external environments of multicellular organisms, and through integrated functioning, maintain a stable internal environment within an ever-changing external environment.</b>																	
3a. Structure and functions of the nervous and endocrine systems and ways in which these systems coordinate the organ systems	Lightly		Lightly			Moderately		Heavily	Heavily	Heavily	Heavily		as needed	Heavily	Heavily	Moderately	
3b. Structure and integrative functions of the main organ systems	Lightly					Heavily	Lightly	Heavily	Heavily	Heavily	Moderately		as needed	Heavily	Heavily	Lightly	
<b>Notes:</b>	This table describes how extensively topics from the MCAT 2015 Biological and Biochemical Foundations of Living Systems section are covered in some courses in Biology and Chemistry. Not all classes of potential interest to pre-health students are listed; only those with a content focus that could easily be mapped onto this framework. Classes being taught this winter are annotated with "Winter 2016". For other courses, the term shown is when the class is usually scheduled (but this is subject to change from year to year).																