
 Biology Department 200 - 400 level courses 	Understand cellular and molecular biological processes		Understand genetic and evolutionary mechanisms		Understand phylogenetic and ecological relationships		Effectively apply experimental and analytical tools		Understand and articulate scientific findings	
	1. Provide examples of the relation between form and function in biology, as expressed in molecular, cellular, and whole-organism physiology	2. Compare and contrast the major cellular processes in eukaryotes and prokaryotes	3. Explain how genetic information is transmitted, and the relationship between genetics and evolution	4. Compare and contrast the primary mechanisms of evolutionary diversification	5. Categorize the diversity of life in terms of the phylogenetic relationships among major organismal groups	6. Describe how interactions among organisms and their environment influence populations, communities, and ecosystem function	7. Quantitatively answer biological questions using mathematical or statistical tools	8. Design, conduct, and interpret experiments using common biological lab and field techniques	9. Effectively and concisely present scientific ideas and the results of scientific research in written and oral form	10. Critique scientific papers, as demonstrated by written or oral summaries of hypotheses, methodology, and conclusions
PRINC CELL MOLEC BIOL (BIOL-0203)	Major concept	Major concept	Major concept	Not addressed	Introduced	Not addressed	Introduced	Introduced	Not addressed	Not addressed
PRINC CELL MOLEC BIOL LAB (BIOL-0203L)	Not addressed	Introduced	Introduced	Not addressed	Not addressed	Not addressed	Introduced	Introduced	Introduced	Not addressed
PRINC ORGANISMAL BIOLOGY (BIOL-0204)	Major concept	Reinforced	Major concept	Major concept	Major concept	Introduced	Introduced	Introduced	Introduced	Not addressed
PRINC ORGANISMAL BIOL LAB (BIOL-0204L)	Major concept	Not addressed	Reinforced	Reinforced	Major concept	Introduced	Not addressed	Introduced	Introduced	Not addressed
FUNDAMENTALS OF MICROBIOLOGY (BIOL-211)	Introduced	Major concept	Reinforced	Not addressed	Reinforced	Introduced	Not addressed	Not addressed	Introduced	Not addressed
FUNDAMENTALS OF MICROBIOLOGY LAB (BIOL-211L)	Reinforced	Major concept	Introduced	Reinforced	Reinforced	Reinforced	Introduced	Reinforced	Introduced	Introduced
HUMAN ANATOMY (BIOL-212)	Major concept	Introduced	Not addressed	Not addressed	Not addressed	Not addressed	Not addressed	Introduced	Introduced	Not addressed
BIOSTATISTICS (BIOL-0215)	Not addressed	Not addressed	Not addressed	Not addressed	Not addressed	Reinforced	Major concept	Major concept	Major concept	Introduced
GENERAL MICROBIOLOGY (BIOL-350)	Reinforced	Reinforced	Reinforced	Reinforced	Reinforced	Reinforced	Reinforced	Major concept	Major concept	Introduced
GENETICS (BIOL-351)	Reinforced	Reinforced	Major concept	Introduced	Introduced	Not addressed	Introduced	Not addressed	Reinforced	Reinforced
EVOLUTION (BIOL-0352)	Not addressed	Not addressed	Major concept	Major concept	Major concept	Reinforced	Reinforced	Not addressed	Not addressed	Reinforced
ECOLOGY & THE ENVIRONMENT (BIOL-0354)	Introduced	Not addressed	Introduced	Not addressed	Introduced	Major concept	Reinforced	Reinforced	Reinforced	Reinforced
EXPERIMENTAL ECOLOGY (BIOL-354L)	Introduced	Not addressed	Not addressed	Not addressed	Not addressed	Major concept	Reinforced	Major concept	Major concept	Reinforced
CELL&MOLEC BIO (BIOL-366)	Major concept	Reinforced	Introduced	Not addressed	Not addressed	Not addressed	Reinforced	Reinforced	Not addressed	Introduced
CELL&MOL BIO LAB (BIOL-366L)	Major concept	Major concept	Introduced	Introduced	Introduced	Introduced	Introduced	Reinforced	Reinforced	Introduced
HUMAN PHYSIOLOGY LAB (BIOL-436)	Major concept	Reinforced	Not addressed	Not addressed	Not addressed	Not addressed	Introduced	Major concept	Introduced	Not addressed
PLANT BIOLOGY (BIOL-459)	Major concept	Reinforced	Reinforced	Reinforced	Major concept	Major concept	Introduced	Introduced	Major concept	Reinforced
ZOOLOGY (BIOL-462)	Major concept	Introduced	Introduced	Reinforced	Major concept	Major concept	Introduced	Not addressed	Introduced	Reinforced
PRINCIPLES OF IMMUNOLOGY (BIOL-485)	Major concept	Not addressed	Reinforced	Reinforced	Not addressed	Not addressed	Not addressed	Introduced	Not addressed	Not addressed