



Course Number Course Name	BIOL 3329 Molecular Cell Biology
Credit Value (Breakdown of theory and lab credits)	3 Theory
Catalog Course Description	You will learn about basic cellular processes and their control mechanisms, including gene expression, protein synthesis, signal transduction pathways, receptor activation and cell cycle. This course is designed to expand the knowledge base of students who have completed introductory-level courses and to serve as a foundation for 400-level courses in biology.
Course Student Learning Outcomes/Objectives /Competencies	<ol style="list-style-type: none"> 1. A review of basic biochemistry 2. Examine the molecular details of some fundamental cellular processes. DNA packaging, DNA replication, protein synthesis, control of gene expression, the synthesis and function of sub- cellular structures, cell cycle including apoptosis, and energy conversion. 3. Selected topics including eucaryotic cells of metazoans function in their multicellular habitat, development of specialized cells and tissues, maintenance of tissue systems, and cell signaling and stem cell tissue systems.
College-Wide Student Learning Outcomes measured (General education courses only)	
Program Student Learning Outcomes measured	<ol style="list-style-type: none"> 1. Provide students with broad conceptual background in biological sciences which will enable them to attain an understanding of organismal form, function, diversity, evolution, ecology, mendelian and molecular genetics, cell structure, function and physiology and molecular processes.