


















# Biochemistry & Biotechnology B.Sc. Honours Course Map

First year	Second year	Third year	Fourth year
 <b>CHEM 1001, CHEM 1002</b> General Chemistry	 <b>BIOC 2200</b> Cellular Biochemistry	 <b>BIOC 3101 and 3102</b> General Biochemistry <b>BIOC 3103 and 4009</b> Practical Biochemistry <b>BIOC 3202</b> Biophysical Techniques and Applications	 <b>BIOL 4301</b> Current Topics in Biotechnology
 <b>BIOL 1103, BIOL 1104</b> Foundations of Biology	 <b>BIOC 2300</b> Physical Biochemistry or <b>CHEM 2103</b> Physical Chemistry I	 <b>BIOL 3104</b> Molecular Genetics <b>BIOL 3301</b> Biotechnology II	 1.0 credit from courses such as: <b>BIOC 3008</b> Bioinformatics <b>BIOC 4200</b> Immunology <b>BIOC 4009</b> Biochemistry of Disease <b>BIOC 4201</b> Advanced Cell Culture and Tissue Engineering *These are a few examples
 <b>MATH 1007, MATH 1107</b> Elementary Calculus I and Linear Algebra I	 <b>BIOL 2001</b> Animals: Form and Function or <b>BIOL 2002</b> Plants: Form and Function	 0.5 credit from: <b>BIOL 3201</b> Cell Biology <b>BIOL 3205</b> Plant Biochem and Physiology <b>BIOL 3033</b> Experimental Microbiology <b>BIOL 3305</b> Human and Comparative Physiology *These are a few examples	 Honours Project (1.0 credit): <b>BIOC 4907</b> Honours Essay and Research Proposal <b>BIOC 4908</b> Research Project
 <b>PHYS 1007, PHYS 1008</b> Elementary University Physics	 <b>BIOL 2104</b> Introductory Genetics <b>BIOL 2301</b> Biotechnology I <b>BIOL 2303</b> Microbiology	 <b>CHEM 3201</b> Advanced Organic I	
	 <b>CHEM 2203, CHEM 2204</b> Organic Chemistry I & II <b>CHEM 2303</b> Analytical Chemistry II <b>CHEM 2501</b> Introduction to Inorganic and Bioinorganic Chemistry		
	 <b>STAT 2507</b> Introduction to Statistical Modeling I		
		0.5 credit from list of approved courses in BIOL	
		0.5 credit from list of approved courses in BIOC, BIOL, CHEM	
	0.5 credit from free electives		
2.0 credits in approved courses outside the Faculties of Science and Engineering (may include NSCI 1000)			

