



### Sample Brief Course Description

<b>Course title</b>	Biology for engineers
<b>Course code</b>	BIO 206
<b>College</b>	Engineering
<b>Department / Program</b>	Biology department
<b>Year/ Level</b>	2/5
<b>Course Type</b>	A. <input type="checkbox"/> University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input type="checkbox"/> Others b. <input checked="" type="checkbox"/> Required <input type="checkbox"/> Elective
<b>Credited Hours</b>	4 hours
<b>Contact Hours</b>	(LT:3,LB:2,TR:0)
<b>Pre-requisites (if any)</b>	---
<b>Co-requisites (if any)</b>	---
<b>Course description</b>	This course covers the cell as the fundamental unit of life. Mechanisms of biological information, handling and energy utilization besides, the structure of biological molecules and their function. In addition, bio-based applications for engineers.
<b>Course Main Objectives</b>	•To acquaint the students about the biology and built up the base to understand the relationship between Engineering and Biology.



	<ul style="list-style-type: none"><li>•To provide students with profound and basic knowledge of the structure and function of different cell types as well as structure, function and transport across the cell membrane.</li><li>•To supply students with basic information on the fundamental biomolecules and their roles in various cellular functions. In addition, bases of molecular biology from DNA to proteins synthesis.</li><li>• To give students essential knowledge on biological based applications.</li></ul>
Learning Outcomes	<b>Knowledge and Understanding:</b> <ol style="list-style-type: none"><li>1. Describe fundamental characteristics of life, diverse cell and tissue types.</li><li>2. Recognize cells metabolic pathways and energy outcomes, the structure of biomolecules and their function as well as mechanisms of biological information handling.</li><li>3. Apply the theoretical Genetic concepts.</li></ol>
	<b>Skills:</b> <ol style="list-style-type: none"><li>1. Evaluate Connection between biological theories and real-life activities through possessing the basic laboratory skills such as experimenting and writing reports.</li><li>2. Conduct the biological solution to biological problems</li></ol>
	<b>Values:---</b>