

PROFORMA FOR MODIFIED COURSE

1.	Title of the Course	Life Sciences
2.	Course Number	BS2101
3.	Status of the Course	Core
4.	Structure of Credits	2-0-0-2
5.	Offered To	UG
6.	New Course/Modification to	New
7.	To be Offered by	Interdisciplinary Course
8.	To take effect from	July 2019
9.	Prerequisite	Nil
10.	Whether approved by the Program	Yes
11.	Course Objective: To provide suitable exposure to the fundamentals in biology in a manner that interests the students, so that they would not be scared of biology, but refresh/update their knowledge and apply it effectively when needed later in life.	
12.	Course Content: Why do engineers need biology? Fundamental functional unit of life; Origin of life; Evolution; Fundamental molecules of life – lipids, carbohydrates, proteins, nucleic acids – and their relevance to the cell, the human body, and bio-products; DNA replication; Cell replication; Transcription and Translation; Mendelian genetics as a useful tool; Coordinated function of cells and homeostasis in the human system.	
13.	Text book(s): 1. Suraishkumar G. K., <i>Biology for Engineers</i> , Oxford University Press, 2019.	
14.	Reference(s): 1. Campbell, N. A., Urry, L. A., Cain, M. L., Wasserman, S. A., Minorsky, P. V., and Reece, J. B, <i>Biology: A Global Approach</i> , Global edition, 11th edition, Pearsons, 2017. 2. Karp, G, <i>Cell and Molecular Biology: Concepts and Experiments</i> , 7th edition, Wiley, 2013.	