

<b>Course title:</b> Origin and diversity of life			
<b>Course code:</b> UBT 101	<b>No. of credits:</b> 2	<b>L-T-P:</b> 30-0-0	<b>Learning hours:</b> 30
<b>Pre-requisite course code and title (if any):</b> Class 12 or equivalent in Science			
<b>Department:</b> Department of Biotechnology			
<b>Course coordinator:</b> Prof. Shashi Bhushan Tripathi		<b>Course instructor:</b> Prof. Shashi Bhushan Tripathi	
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<b>Course type:</b> Major		<b>Course offered in:</b> Semester 1	
<b>Course description:</b> The course intends to provide the students with a broad understanding of different life forms, similarity and variations among and between different taxa of plants (non-flowering and flowering) and animals (both invertebrates and vertebrates). It introduces students to the concept of classification and the utility of morphological, biochemical, anatomical and functional diversity in classification of major groups of living organisms. Further, it provides the students with the concept of molecular basis of evolution as to how different group of organisms arose, and how the DNA sequence information helps in understanding the interrelatedness of different taxonomic groups.			
<b>Course objectives:</b> <ol style="list-style-type: none"><li>1. To provide a broad understanding of diversity of life from microorganisms and fungi to plants and animals</li><li>2. To familiarize the students to key concepts of evolution, speciation and extinction</li><li>3. To familiarize the student to applications of DNA sequence data for identification and classification of organisms</li></ol>			