

Course title: Conservation Genetics and Genomics			
Course code: BBP 144	No. of credits: 2	L-T-P: 30-0-0	Learning hours: 30
Pre-requisite course code and title (if any): Science graduate			
Department: Department of Biotechnology			
Course coordinator: Prof. Shashi Bhushan Tripathi		Course instructor: Prof. Shashi Bhushan Tripathi	
Contact details: shashi.tripathi@terisas.ac.in			
Course type: Core		Course offered in: Semester 2	
<p>Course description:</p> <p>The broad objective of this course is to provide the students a foundation on the concepts, tools and techniques of classical genetics, population genetics and genomics as applied in conservation of biodiversity. The students will be acquainted with various factors that affect the genetic composition of natural populations. Considering the importance of next generation sequencing in generating data for characterization of populations, a module on genome sequencing and its applications in genetic diversity assessment has been included. Further, topics on microbial genetic diversity such as 16S RNA sequencing and metagenomics have also been included.</p>			
<p>Course objectives:</p> <ol style="list-style-type: none"> 1. To introduce the students to concepts of classical and modern genetics 2. To introduce the students to concepts of population and conservation genetics 3. To familiarize the students to next generation sequencing platforms 4. Applications of next generation sequence data for characterisation of genetic resources 			