

Course title: Environmental Statistics			
Course code: NRE 115	No. of credits: 4	L-T-P: 42-18-0	Learning hours: 60
Pre-requisite course code and title (if any): No pre-requisite required			
Department: Natural and Applied Sciences			
Course coordinator(s): Dr Amit Singh		Course instructor(s): Prof Prateek Sharma	
Contact details: prateeks@terisas.ac.in			
Course type: Core		Course offered in: Semester 2	
<p>Course description</p> <p>As the world gets more crowded and technology continues to develop, environmental problems multiply. There are many aspects of these problems—economic, political, psychological, medical, scientific and technological. Addressing such problems often involves quantitative aspects; in particular, the acquisition and analysis of environmental data. Treating these quantitative problems effectively involves the use of statistics. When one is confronted with a new problem that involves the collection and analysis of data, two crucial questions exist: “How will using statistics help this problem?” and “Which techniques should be used?”</p> <p>The course has been designed and intended to help budding environmental scientists/managers to answer these questions in order better to understand and design systems for environmental protection. The course is about how to extract information from data and how informative data are generated in the first place. Analysing data is part science, part craft and part art. An effort has been made through this course to provide some useful tools ‘to get to the grips’ of environmental problems and to encourage the students to develop the necessary craft and art.</p>			
<p>Course objectives</p> <ul style="list-style-type: none"> ▪ Need for studying environmental statistics ▪ Introduce basic concepts useful for environmental data analysis ▪ Become aware of a wide range of applications of statistics in environmental management & decision making ▪ Develop technical skills to use statistical tools and software in environmental data analysis 			