

<b>Course Title:</b> Aerosol Science			
<b>Course Code:</b> NRC 133	<b>No. of Credits:</b> 3	<b>L-T-P:</b> 22.5-15-15	<b>Learning Hours:</b> 45
<b>Pre-requisite Course Code and Title (if any):</b> Basics of climate science or fundamental knowledge of chemistry and physics			
<b>Department:</b> Natural and Applied Sciences			
<b>Course Coordinator:</b>		<b>Course Instructor:</b>	
<b>Contact Details:</b>			
<b>Course Type:</b> Elective		<b>Course Offered In:</b> Semester 2	
<b>Course Description</b> The aerosols affect visibility, climate, health, and quality of life. At the same time, their presence in the atmosphere assists in forming cloud condensation nuclei (CCN). In this context, the course will focus on understanding aerosols' physical and chemical properties, reflecting upon their functional traits affecting stated atmospheric processes. The course will also include the current understanding of carbonaceous aerosol particles as they are known to impact the atmospheric radiative balance directly, affecting the climate regime. An overview of all the global phenomena affected by or related to aerosols will be discussed in this course.			
<b>Course Objectives</b> Upon completion of the course, the student will be able to do the following: <ul style="list-style-type: none"> <li>• To explain the general properties of aerosols and related phenomena.</li> <li>• To understand the optical properties and their role in climate issues.</li> <li>• To explain the applied aspects of aerosols that are relevant to climate.</li> </ul>			