

**Department of Liberal Education**  
**Era University, Lucknow**  
**Course Outline**  
**Effective From: 2023-24**

<b>Name of the Program</b>	<b>B.A. / B.Sc. (LIBERAL EDUCATION)</b>			<b>Year/ Semester:</b>	<b>3<sup>rd</sup> / 6<sup>th</sup></b>
<b>Course Name</b>	<b>Practical on Environmental Disaster &amp; Global Change</b>	<b>Course Code:</b>	<b>EVA306P</b>	<b>Type:</b>	<b>Practical</b>
<b>Credits</b>	<b>01</b>			<b>Total Practical Hours:</b>	<b>30 Hours</b>
<b>Evaluation Spread</b>	<b>Internal Continuous Assessment:</b>	<b>10 Marks</b>		<b>End Term Exam:</b>	<b>15 Marks</b>
<b>Type of Course</b>	<input type="radio"/> Compulsory	<input checked="" type="radio"/> Core	<input type="radio"/> Creative	<input type="radio"/> Life Skill	
<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>Students understand about the weather anomalies resulting in climate change and aggravated intensity and duration of natural disasters.</li> <li>Learn strategies to safeguard themselves and others during environmental emergency.</li> <li>Know about the disaster profile of the country and evaluate risk of development.</li> </ol>				
<b>Course Outcomes (CO):</b> <i>After the successful course completion, learners will develop following attributes:</i>					
<b>Course Outcome (CO)</b>	<b>Attributes</b>				
<b>CO1</b>	Students understand how weather anomalies have been occurring with increasing human activities.				
<b>CO2</b>	Learn about safety protocol that should be adopted at time of emergency.				
<b>CO3</b>	To learn about the disaster profile of the country.				
<b>CO4</b>	To know the causes and effect of cyclones occurred around the world and evaluate change in disaster intensity with time.				
<b>Pedagogy</b>	Interactive, discussion-based, student-centered, program outputs				
<b>Internal Evaluation Mode</b>	Experiment- Writing and Conductance File maintenance/Laboratory record Continuous Attendance and Participation				
<b>Practical No.</b>	<b>Experiments</b>			<b>Contact Hours</b>	<b>Mapped CO</b>
<b>1</b>	To study the change in temperature and rainfall pattern of Lucknow city during last 5 decades.			<b>06</b>	<b>CO1</b>
<b>2</b>	To learn the safety protocol in case of emergency i.e., earthquake and fire.			<b>06</b>	<b>CO2</b>
<b>3</b>	To study the fire disaster management plan of an organization.			<b>06</b>	<b>CO2</b>
<b>4</b>	To identify and analyze the natural disaster (earthquake, landslide, flood and drought) prone status of India and mark on map.			<b>06</b>	<b>CO3</b>
<b>5</b>	Prepare a list of major tropical cyclones occurred in different parts of world in past 20 years, analyze change in frequency & loss occurred.			<b>06</b>	<b>CO4</b>

<b>CO-PO and PSO Mapping</b>														
CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1		3	3			3	3	2	3	2			2	2
CO2		3		3				2	3	3	2	1	3	2
CO3		3	2			3	3	2	2	3	3	3	3	2
CO4		3	3			3	3	2	2	2	3	3	3	2
<i>Strong contribution-3, Average contribution-2, Low contribution-1,</i>														
<b>Suggested Readings:</b>														
<b>Reference Books</b>	1. Conquering Climate Change Anxiety: Prepare for Environmental Disaster, Become a Global Warming Activist, Protect your Mental Health: A Practical Workbook for Millennial's Eco Anger, Guilt, and Stress (Simple Sustainable Living) by Daniel I Stein. 2022. RMC Publishers.													
<b>E-Resource</b>	1. <a href="https://www.cdc.gov/disasters/earthquakes/during.html">https://www.cdc.gov/disasters/earthquakes/during.html</a> 2. <a href="https://visualize.data.gov.in/?inst=98fe9271-a59d-4834-b05b-fd5ddb94ac01">https://visualize.data.gov.in/?inst=98fe9271-a59d-4834-b05b-fd5ddb94ac01</a> 3. <a href="https://data.gov.in/catalog/annual-and-seasonal-mean-temperature-india">https://data.gov.in/catalog/annual-and-seasonal-mean-temperature-india</a> 4. <a href="https://data.gov.in/resource/all-india-area-weighted-monthly-seasonal-and-annual-rainfall-mm-1901-2015">https://data.gov.in/resource/all-india-area-weighted-monthly-seasonal-and-annual-rainfall-mm-1901-2015</a> .													
<b>Internal Practical Evaluation:</b>														
<b>Component</b>					<b>Marks</b>									
<b>Experiment- Writing and Conductance</b>					05									
<b>File maintenance/ Laboratory record</b>					02									
<b>Continuous Attendance and Participation</b>					01									
<b>Viva-Voce</b>					02									
<b>Total Marks</b>					<b>10</b>									

**Course created by:** Dr. Swati Sachdev  
**Signature:**

**Approved by: Prof. Venkatesh Dutta**  
**Signature:**