## Lesson Plan: Climate Change Impacts in Romania

As a **High School** or introductory **Undergraduate** teacher, you can use this lesson plan to **introduce climate change and its impacts in Romania**.

This lesson plan provides an introduction to climate change, causes and impacts of climate change globally, climate change risk profile for Romania that includes climate impacts on major sectors of the country such as agriculture, water resources, human health and industries.

Thus, the use of this lesson plan allows you to teach Climate Science and Climate Change in your classrooms.

Use this Lesson Plan to help the students to understand and find answers to:

- 1. What is Climate Change? What are its causes?
- 2. What are the impacts of climate change on Romania?
- 3. What are the impacts of climate change on agriculture, water resources, human health, and industries in Romania?
- 4. What mitigation practices can be adopted to control the impacts of climate change in Romania?

| Grade Level                  | High School, Undergraduate                |  |
|------------------------------|---|--|
| Climate Topic                | ic Climate Change Impacts in Your Country |  |
| Location                     | Europe, Romania                           |  |
| Access                       | Online                                    |  |
| Language(s)                  | English                                   |  |
| Approximate Time<br>Required | 60 mins                                   |  |

#### About the Lesson Plan

### Contents

|   | Reading (15 min)  |  |  |
|---|---|--|--|
| and <b>Video</b> (5-15   information about what is the scientific evidence for climate change |   | information about what is the scientific evidence for climate change, causes,  |  |
|   | min)  | and impacts of climate change. This can be accessed here.  |  |
|   |   | and impacts of chinate change. This can be accessed <u>nere</u> .  |  |
|   |   | <b>Optional</b> : A set of 7 short video micro-lectures (2-5 minutes in length) on climate change and global warming developed by the National Research Council, The National Academies of Sciences, Engineering, and Medicine. This can be accessed <u>here</u> |  |
| 2   | Reading 1   | A reading by the Climate Change Knowledge Portal of the World Bank that  |  |
|   | (World Bank)  | explains climate change and impacts in Romania.  |  |
| 1.  | (World Dalik)   | explains enhate enange and impacts in Romaina.   |  |
|   |   |  |  |
|   |   | This can be accessed <u>here</u> .   |  |
| 5   | Classroom/Labo A classroom/laboratory activity based on a reading and video in Romania. Thi |  |  |
|   | ratory Activity   | reading and video explains the causes and impacts of Romania on Romania and  |  |
|   | (15 min)  | also states the possible solutions to counter the crisis.  |  |
|   | (13 1111)   | also states the possible solutions to counter the crisis.  |  |
|   |   |  |  |
|   |   | The reading can be accessed here.  |  |
|   |   | The video can be accessed here.  |  |

# Step-by-step User Guide

(Here is a step-by-step guide to using this lesson plan in the classroom/laboratory. We have suggested these steps as a possible plan of action. You may customize the lesson plan according to your preferences and requirements.)

| 1   | Introduce Climate<br>Change through the<br>readings and videos | <ul> <li>This reading titled, "The Causes of Climate Change" from the NASA Global Climate Change website, provides introductory information on climate change and global warming. It contains information on the scientific evidence of climate change, its causes and impacts.</li> <li>This can be accessed here.</li> <li>Optional: This set of 7 short video micro-lectures (2-5 minutes in length) have been developed by the National Research Council, The National Academies of Sciences, Engineering, and Medicine. This can be used to provide additional information on climate change.</li> <li>They include: <ol> <li>What is Climate? Climate Change, Lines of Evidence Chapter 1</li> <li>Is Earth Warming? Climate Change, Lines of Evidence Chapter 2</li> <li>Greenhouse Gasses. Climate Change, Lines of Evidence Chapter 3</li> <li>Increased Emissions. Climate Change, Lines of Evidence Chapter 4</li> <li>How Much Warming? Climate Change, Lines of Evidence Chapter 4</li> </ol> </li> <li>Solar Influence. Climate Change, Lines of Evidence Chapter 6</li> <li>Natural Cycles. Climate Change, Lines of Evidence Chapter 7</li> </ul> |  |
|---|--|---|--|
| This video playlist can be accessed <u>here</u> . |  | This video playlist can be accessed <u>here</u> .<br>Use this interactive website by the Climate Change Knowledge Portal of the   |  |
| 2   | Discuss causes and<br>impacts of Climate<br>Change in Romania  | <ul> <li>World Bank to have your students understand the impacts of Climate Change in Romania. This resource includes the following: <ol> <li>Climate Change Overview of Romania</li> <li>Country Summary</li> <li>Current Climatology: Climate Trends and Variability in Temperatures and Precipitation</li> <li>Climate Projections</li> <li>V. Vulnerability of Romania to Climate Change</li> </ol> </li> <li>Each section contains relevant climate change information including data, projections, and visualizations. The data is visualized through interactive graphs and users can select different indices, model projections, timescales, and sectors to better understand the impacts of climate change in Romania.</li> </ul>   |  |
| 4   | OPTIONAL   | You may wish to conduct a {roleplay} activity in your classroom/laboratory  |  |
|   | Classroom/Laboratory<br>Activity on the 'Lake<br>Chad Crisis'  | to further engage your students in understanding the climate crisis in<br>Romania; specifically on the impact of climate change on food security and<br>water security in Romania.  |  |

# **Learning Outcomes:**

The tools in this lesson plan will enable students to:

- learn about climate change and global warming
- understand the impacts of climate change in Romania
- discuss how changing weather patterns due to climate change could affect Netherland's future
- describe the current and future health risks and economic impacts on Romania due to climate change

## **Additional Resources**



# Credits / Copyrights:

| 1 | Reading "The Causes of Climate Change"                  | by the <u>NASA Global Climate Change</u> website   |
|---|---|--|
| 2 | A set of videos; "Climate Change: Lines of<br>Evidence" | Presented by National Research Council, <u>The</u><br><u>National Academies of Sciences, Engineering, and</u><br><u>Medicine</u> |
| 3 | Reading "Climate Change Risk Profile for Romania"       | By <u>Climate Change Knowledge Portal of the</u><br><u>World Bank</u>  |
| 5 | Additional Resources                                    |  |