PARTICIPANT'S GUIDE

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GENERAL FEATURES OF THE COURSE

1. DESCRIPTION

We welcome you to the course entitled *CLIMATE CHANGE EDUCATION* offered by the Inter-American Development Bank (IDB) through the edX edge platform.

Climate change is one of the biggest challenges of our time. Climate change not only affects the temperature of the planet, but also affects the most important elements for our lives, such as the water and the soil. Therefore, teachers have an essential role in teaching the next generations to act against climate change.

This course is part of **Rise up: Climate Change Education** initiative, developed by the Inter-American Development Bank (IDB). This initiative seeks to encourage children and youth from Latin America and the Caribbean to use their creativity and energy to come up with feasible, sustainable, and long-term strategies to fight climate change.

In this course, we present the main concepts related to climate change and tools that can be integrated into the daily class strategies to teach students in a fun, interactive, and meaningful way.

This course is organized around seven key areas to facilitate comprehension of the climate change phenomenon and how we can live a more sustainable and healthy life.

- What is the **climate change** phenomenon?
- How does our use of **energy** affect climate change?
- How climate change affects the **water** cycle and its consequences to the availability of potable water.
- How the different kinds of cultivation affect the **soil** and its consequences to food availability.
- How human actions affect the **landscape** and how deforestation contributes to climate change.
- How our consumption habits contribute to climate change and initiatives to make our cities more **sustainable**.
- The risks of climate change to our health and well-being, and actions to create a **healthy** environment.

2. PARTICIPANT PROFILE

This course is aimed at primary and secondary teachers in Latin American and Caribbean countries who teach Science and issues related to climate change and the environment.

Those interested in the course can participate free of charge, without conditions or prerequisites.

3. COURSE'S REGISTER MODES

The course is free, consists of 7 content modules plus introduction and closure and is composed of animated videos, instructional, readings, exercises, activities and questionnaires. Remember that you can take the course under one of the following modalities:

- **Audit track**: Having limited and free access to the course material. With this option you will not get a verified certification at the end of the course and you will not have access to the graded assessment questionnaires.

- **Verified Certificate**: in this option you can obtain an official certificate issued by the IDB and edX that you can share on your CV and on LinkedIn.

Throughout the course, you will be informed when your access expires. Take the opportunity to review or download the materials of your interest before that day. Remember to check the customized schedule in this **link**.

To obtain the verified certificate of the course, you must meet **three** conditions:

1. Pass the course, obtaining at least 65% of the total points.
2. Pay $ 25 dollars, which is the minimum cost of issuing certificates that edX establishes
3. Complete identity verification in edX undergo **identity verification in edX**.

If you wish to obtain the certificate of the course, you must opt for the verified certificate mode.

Also, if you registered yourself as an audit track without a certificate and decide to obtain it, you can change the modality by making the respective payment. Review the dates and complete the graded assignments required to earn the certificate. EdX has **financial assistance** for students who need it. If you opt for this alternative, you can download **the tutorial with the steps to obtain the verified certificate**.

4. DURATION AND COURSE DEDICATION

This course is "self-paced", we estimate that you should dedicate around 40 hours to complete all the course's activities, including the graded evaluation activities.

Remember that if you opted to take the course in the audit track mode, you will have free access to the course material, including videos, lectures, forums, additional resources, and non-scored practical exercises. However, you will not have access to the scored evaluation questionnaires.

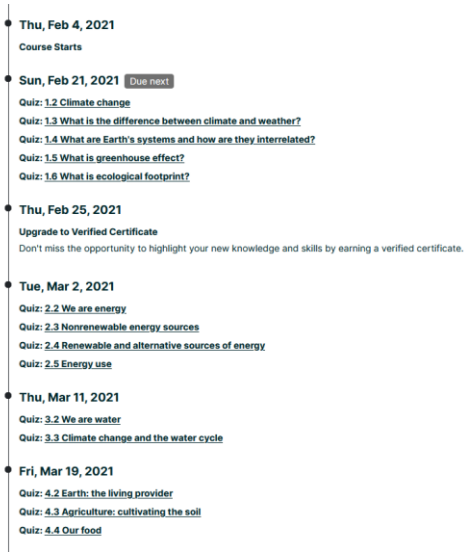
- If you opt for the **Audit track,** you can complete the course during ten weeks from the day you subscribed.
- If you opt for the **Verified track,** you can access the course until the closing date, (**Feb 04th, 2022**) and will have unlimited access to the course content.

4.1 IMPORTANT DATES

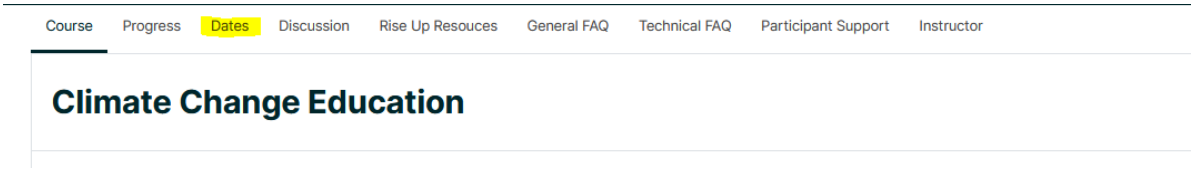
The most important dates you should keep in mind are the following ones:

- February 04th, 2021: course becomes available.
- January 26th, 2022: deadline to apply for the verified certificate.
- January 27th, 2022: deadline to send in your Campaign about climate change.
- February 03rd, 2022: deadline to evaluate your peers' work.
- February 04th, 2022: end of the available period and the course becomes archived.

Remember to check the personalized schedule in the **first page** of the course or in the tab ¨**dates**¨.



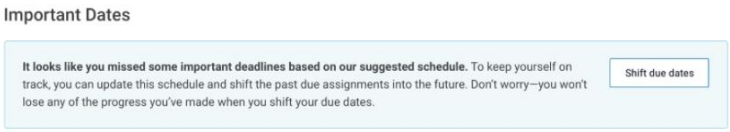
In the dates tab you will find a suggested schedule according to the modality you have chosen and the date on which you have registered.



If you are enrolled in the **verified certificate track**, the edX platform will show you in this space a suggested schedule, these are customized dates to help you plan and control the pace of your studies.

If you can't send a quiz, notice that an assignment is overdue, or read a message that you haven't met the suggested deadline, don't worry as you can change the suggested dates at any time until the course closes (**February 04th, 2022**)**.**

You can change the due dates by clicking on the button "Shift due dates" to update the calendar.



This process will not affect the progress you have made in the course so far.

Keep in mind that this button will not be activated when the suggested date has not expired, also it will not be possible to change the expiration date of any open response evaluation and the end of course date is not modifiable.

5. IMPORTANT CONSIDERATIONS

To complete the course, you will need:

- A computer with Internet access. We also recommend having updated versions of one of the following browsers: Chrome, Firefox, Safari or Internet Explorer (version 9 onwards).
- You can also access the course through your mobile device or tablet, downloading the edX application from Google Play or Apple Store.

If this is your first edX course, we recommend that you start by viewing the **demo course**[1] before you start, to learn how to navigate the platform. If you are already familiar with edX, you can review the first section of the course, "Start here", where you will find all the information you need to successfully complete this MOOC.

This MOOC does not have tutors. Therefore, the forums will not be moderated by the course team. However, we will be monitoring and intervening to highlight contributions and take action if the **participation criteria in the forums** is not complied with.

6. LEARNING GOALS

At the end of this course, the participants will be able to:

- Prepare an action plan to generate understanding in the school community and the students of long-term and short-term causes, effects and risks of climate change.
- Promote mitigation actions and strategies to adapt to climate change in schools.

To achieve these objectives, in each module, you will have to fulfil specific goals that will help you carry out this task successfully.

[1] Until December 2020, the demo course is only available in English with Spanish subtitles.

7. CONTENT STRUCTURE AND SPECIFIC LEARNING GOALS

The content of the course is structured in seven modules that pursue specific objectives aligned with the above-mentioned general objectives. In what follows, you will see the objectives of each module.

MODULE START HERE

- Become familiar with the edX platform and identify how to access the learning resources.
- Identify the rules of participation and the guidance and help resources contained in the course.
- Identify the evaluations of each module and distinguish the types of questions that you will find in the questionnaires.
- Identify the general objective of the course and the tasks that you will need to complete to pass it.

MODULE 1: OUR CLIMATE IS CHANGING

Climate change

- Differentiate between climate change and global warming.

What is the difference between climate and weather?

- Differentiate between climate and weather and the effects in local cultures.

What are the Earth's systems, and how are they interconnected?

- Identify the Earth's systems and how they are interconnected.

What is the greenhouse effect?

- Define what is the greenhouse effect and identify its main causes.
- Differentiate between climate change and climate variability.

What is the ecological footprint?

- Define ecological footprint and identify its impacts.
- Identify the main actions taken at the global level to mitigate climate change.
- Identify the main direct effects and impacts of climate change.

MODULE 2: ENERGY AND CLIMATE CHANGE

We are energy

- Identify the main types of energy.
- Differentiate renewable and nonrenewable sources of energy.

Nonrenewable energy sources

- Recall the most common energy source in Latin America and the Caribbean.
- Identify the ecological, social and economic impact of the different nonrenewable sources of energy.

Renewable and alternative sources of energy

- Identify the ecological, social and economic impact of different renewable sources of energy

Energy use

- Identify ways to reduce energy consumption.

MODULE 3: WATER AND CLIMATE CHANGE

We are water

- Identify how human action at the individual, community and global level affect the water cycle.

Climate change and the water cycle

- Identify the main consequences of changes in the water cycle for humans, animals and plants.

MODULE 4: SOIL AND CLIMATE CHANGE

Earth: the living provider

- Recognize the different soil types.
- Identify the layers that make up the soil.

Agriculture: cultivating the soil

- Identify the environment, social and economic impact of the different cultivation methods.

Our food

- Identify how climate change affects the availability and quality of food.

MODULE 5: LANDSCAPE AND CLIMATE CHANGE

Our landscape

- Identify the elements that make up the landscape.

Humans and the landscape

- Differentiate between a natural phenomenon and natural disaster.
- Identify how human action affects the landscape and its connection to disasters.
- Identify the importance of forests, wetlands and the risks of deforestation.

MODULE 6: SUSTAINABLE ENVIRONMENTS

Megacities

- Identify the main effects of the development of megacities for rural areas, our ecological footprint and their impact on the environment and our health.

Megacities are megaconsumers

- Identify how the consumer society in which we live contributes to our ecological footprint and climate change.
- Identify the three laws and five Rs of a responsible consumer

What can we do?

- Define sustainable cities and identify major ongoing initiatives for the development of sustainable cities

MODULE 7: HEALTHY ENVIRONMENTS

Ensuring healthy Environments

- Identify the risks of climate change and development to our health.
- Identify the factors that make up a healthy environment.

Solid waste management

- Identify the impacts of improper solid waste management

Managing risk in the school

- Identify the main actions at the individual, school and community level to create a healthy environment.

8. METHODOLOGY

The course is available in a virtual modality, where there is no tutor in charge of monitoring the participant's progress, but rather it is self-directed so that each participant should advance autonomously in the schedules and times that they decide.

In the design of the course, we have combined passive learning resources, such as videos and readings, with active learning resources, in which participation and commitment are the basis for learning.

The purpose of the active learning resources is to apply theoretical content to your country's reality through guided activities that incorporate social and collaborative learning principles.

It is important to keep in mind that learning takes place through a conscious effort to investigate, analyze, reflect and share on topics of interest. We invite you to get the most out of the course by actively participating in it.

The first resource of each module consists of a video that presents the theme for the course section. Also, in the introduction of each module, you will find a description of the learning objectives, activities and assessments of the module. We recommend that you read this page carefully so that you are aware of the activities that you must carry out to complete the course successfully.

8.1 LEARNING RESOURCES

Each module is divided into sub-modules within which you will find various types of components or learning resources:

- **Videos:** they are short and present in a fun way the different concepts related to climate change.
- **Readings:** based on Rise Up's lesson plans and green school toolkit, will allow you to understand in greater detail each of the concepts related to climate change and presents methodologies to teach these concepts in the classroom.
- **Online games:** a fun way to apply the concepts learned in the course and are an example of a tool that you can use in class with your students.

- **Discussion forums**: spaces for debate and discussion about experiences and contents of the course. We invite you to participate actively in the forums, share the results of your activities and your experiences in the classroom. Participation in the forums will not be graded, but we strongly recommend that you participate in the discussions, as this is one of the activities in which all participants will be able to connect and broaden their understanding of climate change and how to teach it. More details in the **Guide for discussion forums.**

- **Quizzes:** evaluations of about 3 - 6 multiple-choice questions with the goal of assessing learning gain at the end of each sub-module. For more information, see **Evaluation Criteria.**

- **Peer review activities:** they correspond to the work that you must carry out throughout the course, and that has the goal of applying what you have learned in the course. The three peer review activities are graded, therefore, count towards the final grade of the course. For more information, see **Evaluation Criteria.**

8.2 EVALUATION CRITERIA

The final grade of the course corresponds to a weighted average of the grades of the sub-module quizzes and peer review activities, according to the following relative weights:

- 83% Quizzes
- 17% Peer review activities

8.2.1 QUIZZES

Each module is divided into sections or sub-modules, and at the end of each module, you will find a quiz that includes multiple-choice, multiple-answer, true or false and/or drag and drop questions that aim to reinforce learning and asses the achievement of the learning objectives for the module.

8.2.2 PEER REVIEW ACTIVITIES

Throughout the course, you will have to complete **three peer review activities** that has the goal to evaluate the achievement of the **course's learning objectives**. Your activities will be assessed by two other participants, and the final grade of each activity will be the average of both assessments.

To successfully complete the peer review activities, you must also assess the work of three classmates. **Keep in mind that if you do not assess your classmates or one of your classmates does not assess you, you will not be able to receive a grade for the activity.**

All peer review activities will have an associated **rubric**, which will allow you to assess the work done using homogeneous criteria. You will have access to the rubric at the beginning of each activity so that you have in mind the expectations for the activity and how your work will be assessed.

These activities will probably be the most demanding in time and effort throughout the course, but also the most significant in terms of learning and the development of course objectives. Therefore, we strongly recommend that you **complete the activities as suggested throughout the course** and do not leave them all to complete at the end.

You have until the penultimate week of the course to complete the peer review activities and until the last week to assess the activities of other classmates, as it is explained in the **key dates box.**

9. INSTRUCTORS

Emma Naslud-Hadley

Since September 2002, Emma Näslund-Hadley is an education specialist in the Education Division at the Inter-American Development Bank (IDB) in Washington DC. She leads and collaborates in the design and execution of a wide spectrum of education sector projects. She is the coordinator of the Bank's efforts to improve mathematics and natural science education.

Between 1999 and 2002 she was a political advisor at the European Parliament working on education policies, gender, and labor market issues. Previously she held positions with the United Nations and the Swedish International Development Agency, doing design, execution, and monitoring of education projects in Central America, Mexico, the Dominican Republic, and Cuba. She is the author of papers in peer reviewed journals and institutional reports.

Emma has a master's degree in international economics and finance from the University of Linkoping and a master's degree in public affairs from Princeton University.

Juan Paredes

Juan Paredes is responsible for the technical advice of renewable energy projects financed by the bank, including wind and solar. He has also worked with several governments in the region on studies and policy design for the integration of non-conventional renewable energy in electrical systems, smart grids and regional electrical integration projects. Previously he has been involved with private developers and consultants of renewable energy projects in Germany, Spain and the United Kingdom.

He has studied mechanical and physical engineering at the University of Los Andes in Bogotá, Colombia and a master's degree in Renewable Energies from the University of Oldenburg in Germany. He also has specialization courses in Harvard University's Infrastructure, Energy and Climate Change at MIT, and Innovation in Energy at Stanford University.

10. PARTICIPANT SUPPORT SERVICES

As the course unfolds, the following services will be available:

10.1 EDX HELP CENTER

In the edX Help Center, you will find answers to frequently asked questions about starting the course, basic edX information, certificates and other related topics.

10.2 PARTICIPANT SUPPORT

In the "**Participant support**" tab you will find a series of resources that you can use according to your needs:

- **General FAQ**: here you will find answers to general course topics, such as deadlines or the format of assessment questionnaires.
- **Technical FAQ**: here you will find answers to technical questions, such as the visualization of resources on computers or mobile devices.
- **Technical assistance form**: if you do not find an answer to your question in both pages bellow, at the Course's top menu, in Participant support tab, you will find a form through which you can request personalized technical assistance. The response time is less than 24 hours from Monday to Friday and up to 48 hours on weekends.

11. GENERAL POLICIES

11.1 IDBX ACCESSIBILITY POLICY

Since we use the edX platform to deliver the course, we have adopted the edX **accessibility policy**.

11.2 ACADEMIC INTEGRITY POLICY

Since the edX platform is used to deliver the course, academic integrity issues are addressed through the **edX honor code.**

11.3 PRIVACY POLICY

Since the edX platform is used to deliver the course, privacy issues are addressed through the **edX privacy policy.**

11.4 LATE DELIVERY POLICY

If you opt for the verified certificate, the deadline for completing all the graded activities is the last day of the course. After the deadline, assessment options will be disabled.