



FUNDAMENTALS OF CLIMATE CHANGE AND NATURAL DISASTERS


Assoc. Prof. Le Anh Tuan





LECTURE NOTES





Lecture notes
FUNDAMENTALS OF CLIMATE CHANGE AND NATURAL DISASTERS
Course Code: ER601

Chapter 1
BASICS ON CLIMATE SCIENCES

Assoc.Prof.Dr Lê Anh Tuấn
Viện Nghiên cứu Biến đổi Khí hậu – Đại học Cần Thơ
Khoa Môi trường và Tài nguyên Thiên Nhiên
Trường Đại học Cần Thơ
E-mail: latuan@ctu.edu.vn

- Level Master
- This document is available in Vietnamese.
- Target student audiences Master in Climate Change & Delta Management





SUMMARY



The module equips students with the basics of climate, natural disasters and climate change, and scenarios of change in climate change research., Impacts of natural disasters and climate change aspects of life, production, identification of impact mitigation and adaptation measures, and disaster management.





LECTURE NOTE CONTENTS



Topic 1 The Basics of Climate Science

Equip climate science background, climate system concepts and related weather elements

Topic 2. Disaster Phenomena

Understand general concepts of natural disasters on earth and feature some common disaster images.

Topic 3. Climate Change and Sea Level Rise

Climate Change Awareness, Global Climate Change Evidence, Climate Change and Sea Level Rise scenarios, emphasis on Viet Nam and Mekong Delta

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union



LECTURE NOTE CONTENTS



Topic 4. Impacts of Climate Change and Sea Level Rise

Understand the effects of climate change and rising water in different key sectors and industries.

Topic 5. Responding to Climate Change

Introduction of effective mitigation measures to mitigate and adapt to climate change and sea level rise, examples in Vietnam and the Mekong Delta.

Topic 6. Disaster Risk Management

Knowledge of natural disaster management at the government and community level, following 3 sections before, during and after a disaster.

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union



THANK YOU

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union



LESSON – Slide Presentation



Lecture notes

FUNDAMENTALS OF CLIMATE CHANGE AND NATURAL DISASTERS

Course Code: ER601

Chapter 2

NATURAL DISASTER PHENOMENA

Assoc.Prof.Dr Lê Anh Tuấn

Viện Nghiên cứu Biến đổi Khí hậu – Đại học Cần Thơ

Khoa Môi trường và Tài nguyên Thiên Nhiên

Trường Đại học Cần Thơ

E-mail: latuan@ctu.edu.vn

CONTENTS

Chapter 2. Natural disaster phenomena

2.1. Disaster Overview

2.2. Thunderstorm, Tropical Low Pressure, Storm

2.3. Floods and Droughts

2.4. Landslide and Subsidence

Exercises and Discussion





LESSON - Exercises



Excercise 1



The most common misunderstanding about climate change is that the Earth's climate has changed naturally in the past, therefore humans are not the cause of global warming. That is not correct. What are some analogies or rebuttals that help debunk this myth?



Tài liệu tham khảo



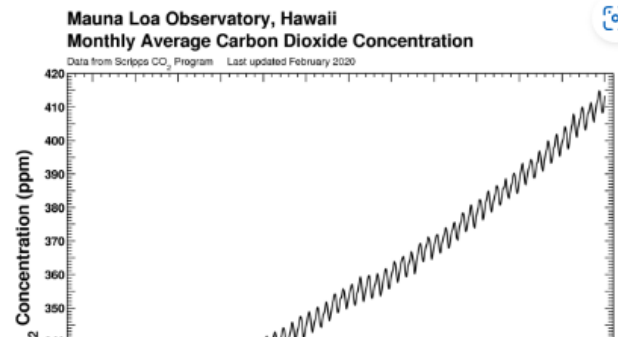
Chapter 2



Exercises 2



This is a graph of carbon dioxide in Earth's atmosphere, measured since 1958. There are two patterns in this data, what are they?



The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union



LESSON - Exercises



Chapter 3



Exercise 3



Finding the key factors relate to the causes and effects of human-induced climate change.

Chapter 4



Exercise 4



Many of us are already familiar with solutions to climate change. While there are many actions we can take every day, it's important to focus on the solutions with the biggest result. Listing 10 most of the actions will reduce greenhouse emissions and will adapt climate change negative impacts?

Chapter 5



Excercise 5



In your opinion, what are the responsibilities of countries that emit a lot of greenhouse gases that cause global warming?





Survey

End of Course Survey(MARE Courses)

All information obtained from this form will be protected. Thank you for your responses.

[Đăng nhập vào Google](#) để lưu tiến trình của bạn. [Tìm hiểu thêm](#)

* Biểu thị câu hỏi bắt buộc

Email *

Email của bạn

Program *

- ☐ Bachelor of Engineering
- ☐ Master of Science
- ☐ Master of Engineering

<https://wrd.ctu.edu.vn/projects/mare-project/end-of-course-survey-mare-courses.html>

Result



End of Course Survey(MARE Courses)

1. Program

Attended MARE Course	Program	COUNTA of Program
		0
Total		0

Environmental modeling	Bachelor of Engineering	1
------------------------	-------------------------	---

Environmental modeling Total		
------------------------------	--	--

Fundamentals of climate change and natural disaster	Master of Science	
---	-------------------	--

Fundamentals of climate change and natural disaster Total		
---	--	--

Hydrological Modelling	Master of Engineering	
------------------------	-----------------------	--

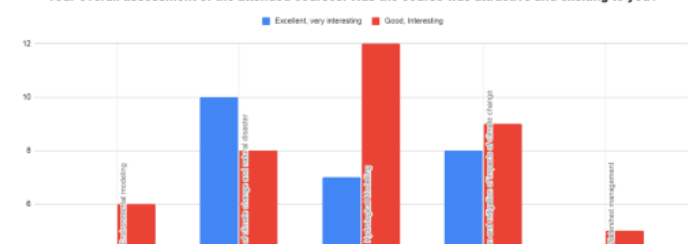
Hydrological Modelling Total		
------------------------------	--	--

Grand Total		
-------------	--	--

3. Your overall assessment of the attended courses. Was the course was attractive and exciting to you?

Your overall assessment of the attended courses. Was the course was attractive and exciting to you?	Environmental modeling	Fundamentals of climate change and natural disaster	Hydrological Modelling	Principles of adaptation and mitigation of impacts of climate change	Watershed management	Grand Total
Excellent, very interesting	0	3	10	7	8	2
Good, Interesting	0	6	8	12	9	5
Grand Total	0	9	18	19	17	7

Your overall assessment of the attended courses. Was the course was attractive and exciting to you?



https://wrd.ctu.edu.vn/images/mare-project/feedback-survey/End_of_Course_Survey_final.pdf

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.










Co-funded by the
Erasmus+ Programme
of the European Union



List participant of course



<input type="checkbox"/>	Tên đệm và tên / Họ	Tên đăng nhập	Địa chỉ thư điện tử	Mã số ID	Vai trò	Nhóm	vào khóa học	Trạng thái
<input type="checkbox"/>	 Tram Che Thi Bich	m2923004	tramM2923004@gstudent.ctu.edu.vn	M2923004	Sinh viên	Không phân nhóm	42 Các ngày 5 giờ	Đang hoạt động
<input type="checkbox"/>	 Nhat Giap Minh	m2923003	nhatM2923003@gstudent.ctu.edu.vn	M2923003	Sinh viên	Không phân nhóm	42 Các ngày 3 giờ	Đang hoạt động
<input type="checkbox"/>	 Quang Le Nhat	b2108508	quangB2108508@student.ctu.edu.vn	B2108508	Sinh viên	Không phân nhóm	7 Các ngày 12 giờ	Đang hoạt động
<input type="checkbox"/>	 Huynh Vuong Thu Minh	001423	hvtminh@ctu.edu.vn	001423	Giảng viên, Giảng viên	Không phân nhóm	132 Các ngày 6 giờ	Đang hoạt động
<input type="checkbox"/>	 Linh Ngo My	m2923002	linhM2923002@gstudent.ctu.edu.vn	M2923002	Sinh viên	Không phân nhóm	42 Các ngày 6 giờ	Đang hoạt động
<input type="checkbox"/>	 Nguyen Dinh Giang Nam Nguyen	001668	ndgnam@ctu.edu.vn	001668	Giảng viên, Giảng viên	Không phân nhóm	Chưa lần nào	Đang hoạt động
<input type="checkbox"/>	 Tuyen Nguyen Thi Mong	m2923005	tuyenM2923005@gstudent.ctu.edu.vn	M2923005	Sinh viên	Không phân nhóm	41 Các ngày 2 giờ	Đang hoạt động

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union



List participant of course



THANK YOU

