



Marine Coastal and Delta Sustainability for Southeast Asia

610327-EPP-1-2019-1-DE-EPPKA2-CBHE-JP



COURSE PRESENTATION

WATERSHED MANAGEMENT

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



OVERVIEW



- This is for course **WATERSHED MANAGEMENT**
- Site URL: <https://elearning.ctu.edu.vn/course/view.php?id=2450>
- Language: Vietnamese + English
- Modules:
 - Introduce
 - Issues in watershed management
 - Basin management solutions
 - Basin management solutions
 - Assessment of climate change impacts on river basins





MAIN PAGE



Main Page

Lecturer: Assoc. Prof. Nguyen Dinh Giang Nam

Email: ndgnam@ctu.edu.vn



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 and adaptation mitigation measures and disaster management.



Slide



Watershed Management syllabus



Link khảo sát khi kết thúc khóa học



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



MAIN PAGE - Syllabus



Main Page

Lecturer: Assoc. Prof. Nguyen Dinh Giang Nam

Email: ndgnam@ctu.edu.vn

Summary

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



Slide

Watershed Management syllabus



Link khảo sát khi kết thúc khóa học



WATERSHED MANAGEMENT (3 ECTS)

Fall semester, 2021-2022

| | |
|------------------|----------------------------------------------|
| Coordinator | College of Environment and Natural Resources |
| Credits | 3 ECTS |
| Lecturers | Nguyen Dinh Giang Nam |
| Level | Master |
| Host institution | Can Tho University |
| Course duration | 30 hours |

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 and adaptation mitigation measures and disaster management.

Target student audiences

Master in Climate Change & Delta Management

Prerequisites

Required courses (or equivalents): NO

Aims and objectives

- Students have a general knowledge of watershed management
- Analyze the causes of problems in watershed management
- Skills of analyzing suitable methods, which are popular in the world today.
- Knowledge of strategic environmental management including key issues and concerns, assessment steps and recommendations

Authentic Tasks:

Desired learning outcomes:

By the end of the course, successful students will:

| | |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge | Module is conceptualized to provide recommendations for application of watershed planning and management. In addition, in watershed management, the module introduces a multidisciplinary approach related to the fields of environmental science, public policy, urban / rural and regional planning and Assessment. strategic environment. |
| Comprehensive | Help participants grasp the basics of targeting and targeting to address watershed water resource issues. |
| Application | Find social-physical and interdependent relationships, especially between water systems and the environment, and socio-economic development. |

Page 1



Erasmus+ CBHE Marine Coastal and Delta Sustainability for Southeast Asia

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



MAIN PAGE



Main Page

Lecturer: Assoc. Prof. Nguyen Dinh Giang Nam

Email: ndgnam@ctu.edu.vn

Summary

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

Slide



Watershed Management syllabus

Link khảo sát khi kết thúc khóa học

The image shows the cover and agenda of the 'Watershed Management Course Part 1-2'. The cover features the Can Tho University logo, the Erasmus+ logo, and the MARE logo. The title 'WATERSHED MANAGEMENT COURSE PART 1 - 2' is prominently displayed. Below the title, the lecturers are listed: 'Nguyen Dinh Giang Nam, PhD CENREs, CanTho University' and 'Nguyen Hieu Trung, Prof, CanTho University'. A disclaimer at the bottom of the cover states: '*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect 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'. The agenda is divided into two parts: Part 1, which includes '1. River Basin', '2. Integrated Water Res. Management (IWRM)', '3. Surface water / Groundwater Interaction', '4. Model for IWRM', and '5. Simple IWRM model practice'; and Part 2, which is 'Discussion'. The website 'www.ctu.edu.vn' is visible at the bottom of both pages.

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



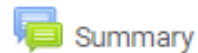
MAIN PAGE



Main Page

Lecturer: Assoc. Prof. Nguyen Dinh Giang Nam

Email: ndgnam@ctu.edu.vn



Summary

The module equips students with the basics of climate, natural disasters and climate change, and : Impacts of natural disasters and climate change aspects of life, production, identification of impac disaster management.



Slide



Watershed Management syllabus



Link khảo sát khi kết thúc khóa học



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

Attended MARE Course

- Fundamentals of climate change and natural disaster





LESSON PLAN



Course outline

| Week | Topics |
|--------|---------------------------------------------------------------|
| Week 1 | Topic 1: Introduce |
| Week 2 | Topic 2. Issues in watershed management |
| Week 3 | Topic 3. Basin management solutions |
| Week 4 | Topic 4. Basin management solutions |
| Week 5 | Topic 5. Assessment of climate change impacts on river basins |
| Week 6 | Topic 6. Assessment of climate change impacts on river basins |
| Week 7 | Group presentations |
| Week 8 | Final examination |



River Basin

What is a River Basin?

Catchments are:

- the land area which collects the rainfall,
- the main stem of the river, the tributaries and groundwater systems that carry the water;
- the floodplain and the wetlands which receive the water

www.ctu.edu.vn

River Basin (cont.)

The Mekong Basin is an International River Basin

Each nation makes a contribution to water flow in the Mekong River:

| | |
|----------|-----|
| China | 16% |
| Myanmar | 2% |
| Laos | 35% |
| Thailand | 18% |
| Cambodia | 18% |
| Viet Nam | 11% |

The Mekong River Basin
 Characteristics:
 Area: 783,000 km² (302,000 mi²)
 Length of mainstem: 4,800 km (3,000 mi)
 Average discharge: 15,000 m³/s (420,000 cfs)

www.ctu.edu.vn

Integrated Water Resources Management (IWRM)

River basin can be divided into:

- According to the Technical Advisory Committee (TAC) Global partnership 2000
IWRM is a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

www.ctu.edu.vn

Integrated Water Resources Management (IWRM) (cont.)

In order to understand better "integrated" approach

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Traditional approach • One sector • Limited institutions involved • Decision making at one sector • Specific issues addressed • Specific interests solved • Sectoral allocation of funds | <ul style="list-style-type: none"> • Integrated approach – Multi sectors – Various institutions involved – "collective" decision making – Complex issues addressed – Overriding interests solved – National allocation of funds |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

www.ctu.edu.vn



Survey

Result



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>

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

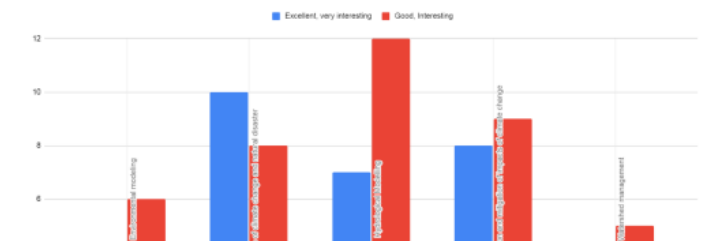
Fundamentals of climate change and natural disaster Total

Hydrological Modelling

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? | Fundamentals of climate change and natural disaster | | | | | Grand Total | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|------------------------|----------------------------------------------------------------------|----------------------|-------------|-----------|
| | Environmental modeling | Fundamentals of climate change and natural disaster | Hydrological Modelling | Principles of adaptation and mitigation of impacts of climate change | Watershed management | | |
| Excellent, very interesting | 0 | 3 | 10 | 7 | 8 | 2 | 30 |
| Good, Interesting | 0 | 6 | 8 | 12 | 9 | 5 | 40 |
| Grand Total | 0 | 9 | 18 | 19 | 17 | 7 | 70 |

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 | Lần truy cập cuối vào khóa học | Trạng thái |
|--------------------------|-----------------------------|------------------|-----------------------------------|----------|---------------------------|--------------------|--------------------------------------|--------------------|
| <input type="checkbox"/> | Tram Che Thi Bích | m2923004 | tramM2923004@gstudent.ctu.edu.vn | M2923004 | Sinh viên | Không phân nhóm | 50 Các ngày 7 giờ | Đang hoạt động |
| <input type="checkbox"/> | Nhat Giap Minh | m2923003 | nhatM2923003@gstudent.ctu.edu.vn | M2923003 | Sinh viên | Không phân nhóm | 50 Các ngày 5 giờ | Đang hoạt động |
| <input type="checkbox"/> | Quang Le Nhat | b2108508 | quangB2108508@student.ctu.edu.vn | B2108508 | Sinh viên | Không phân nhóm | 15 Các ngày 14 giờ | Đang hoạt động |
| <input type="checkbox"/> | Linh Ngo My | m2923002 | linhM2923002@gstudent.ctu.edu.vn | M2923002 | Sinh viên | Không phân nhóm | 50 Các ngày 8 giờ | Đang hoạt động |
| <input type="checkbox"/> | Tuyen Nguyen Thi Mong | m2923005 | tuyenM2923005@gstudent.ctu.edu.vn | M2923005 | Sinh viên | Không phân nhóm | 49 Các ngày 4 giờ | Đang hoạt động |
| <input type="checkbox"/> | Văn Nhiều Phan | 002473 | pvnhieuc@ctu.edu.vn | 002473 | Giảng viên, Giảng viên | Không phân nhóm | 23 giây | Đang hoạt động |
| <input type="checkbox"/> | Chau Truong Thi Ngoc | m2923001 | chauM2923001@gstudent.ctu.edu.vn | M2923001 | Sinh viên | Không phân nhóm | 50 Các ngày 7 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

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