

Template syllabus of the revised courses

Course Name : WATERSHED MANAGEMENT
Number of credits : 3 ECTS

Period : Third semester

Coordinator	A/P Nguyen Van Cong
Credits	3 ECTS
Lecturers	A/P Nguyen Dinh Giang Nam
Level	Master
Host institution	College of Environment and Natural Resources, Can Tho University
Course duration	7 weeks
New/revised	Revised

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): N/A

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

The Authentic Tasks are:

This course will help students understand the knowledge of watershed management, the module introduces a multidisciplinary approach related to the fields of environmental science, public policy, urban / rural and regional planning and Assessment

General learning outcomes:

By the end of the course, successful students will:

Knowledge

- Have full understanding of climate change mitigation and adaptation concepts



Comprehensive

- Have capacity and skills to initiate researches or projects related to climate change

Application

- Contribute to the debate in the policy process for climate change mitigation and adaptation.

Overview of sessions and teaching methods

The course will make most of interactive and self-reflective methods of teaching and learning and, where possible, avoid standing lectures and presentations.

Learning methods

- Project Based Learning
- Literature review
- Stakeholder analysis / customer consultation

Course outline

Week 1	Topic 1: Introduction
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 Final examination

Literature

Compulsory
N/A

Recommended:

- [1] FAO, 2012. Climate change adaptation and mitigation. Challenges and opportunity in food sector. Food and Agriculture Organization of the United Nations.
<http://www.fao.org/docrep/016/i2855e/i2855e.pdf>
- [2] Climate Change 2014: Impacts, Adaptation, and Vulnerability
<http://www.ipcc.ch/report/ar5/wg2/> ; in Fifth Assessment Report (AR5) by the IPCC
<http://www.ipcc.ch/report/ar5/>
- [3] SUSTAINABLE DEVELOPMENT KNOWLEDGE PLATFORM
<https://sustainabledevelopment.un.org>
- [4] Global Leadership for Climate Action, 2009. Facilitating an International Agreement on Climate Change: Adaptation to Climate Change.
http://www.unfoundation.org/assets/pdf/adaptation_to_climate_change.pdf
- [5] The Global Competitiveness Report 2014–2015 (Full Data Edition
http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf
- [6] Guide to the Millennium Assessment Reports
<https://www.millenniumassessment.org/en/index.html>
- [7] 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4. Agriculture, Forestry and Other Land Use: <https://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html>
- [8] REDD+ Reducing Emissions from Deforestation and Forest Degradation
<http://www.fao.org/redd/en/>
- [09] Future Earth- Research, Innovation, Sustainability, <http://www.futureearth.org/about>
- [10] “Future City” Initiative: <http://www.kantei.go.jp/jp/singi/tiiki/kankyoe/en/about/index.html>, FINAL-2018-TCFD-Status-Report-092518
- [11] 2018 Status Report: Task Force on Climate-related Financial Disclosures: Status Report
<https://www.fsb-tcfd.org/wp-content/uploads/2018/08/FINAL-2018-TCFD-Status-Report-092518.pdf#search=%27FINAL2018TCFDStatusReport092518%27>

Course workload

The table below summarizes course workload distribution:

Activities	Learning outcomes	Assessment	Estimated workload (hours)
In-class activities (25 hours of theory and 5 hours of group presentations)			
Lectures	Understand theories, concepts, methodologies and tools	Join the class	4 hours / chapter
Moderated in-class discussions	Discuss each case of the lesson	Class participation and preparedness for discussions	
In-class assignments, homework assignment	Plenary discussion	Class participation	



		and preparedness for assignments	
Reading and discussion of assigned papers for preparation for lectures		Class participation, creative and active contribution to discussion	
Presentation group	Depending on the number of academies and topics, it will be classified into appropriate groups	Quality group exercises and individual presentations	
Independent work (75 hours)			
Working group: - Contribution to group case studies projects - Contribute to the preparation and delivery of personalized presentations - Contribute to web application		Quality group exercises and individual presentations	
Course group exercises			
Presentation group		Quality group exercises and individual presentations	
Total			

Grading

The students' performance will be based on the following:

- Assessment**
- Progress assessment (10%): attend class and discuss plenary
 - Group report (30%): Participants will be divided into groups of 4-5 students and choose 1 topic and complete a group project report according to specific requirements of each topic.
 - Final examination (60%): Multiple choice quiz

- Evaluation**
- A (8,5 – 10)
 - B (7,0 – 8,4)
 - C (5,5 - 6,9)
 - D (4,0 – 5,4)