



CLIMATE CHANGE MITIGATION AND ADAPTATION(4.5 ECTS)

Summary

This course aims to provide students with knowledge and information on of climate change mitigation and adaptation concepts and practices. The course will focus on main contains:

- Understanding climate change, it causes and impacts (concepts such as adaptation and mitigation, causes and risks) and implications for food security, agriculture, aquaculture and natural resource management;
- Concepts and assessment of vulnerability, resilience, coping strategies and sustainable development processes;
- Informatics throughout grid eco-system evaluation and management
- Social system innovation to climate change; and
- Practice on design sustainable society

Aims and objectives

- Have capacity and skills to initiate researches or projects relate to climate change,
- Contribute to the debate in the policy process for climate change mitigation and adaptation

Authentic Tasks:

Desired learning outcomes:

It is expected that students after finishing the course will:

Knowledge

- Have full understanding of climate change mitigation and adaptation concepts

Comprehensive

- Have capacity and skills to initiate researches or projects relate 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

Literature

[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>