

Course Syllabus				
Course Titles/Codes	<b>Perspectives on Climate Change and REDD+</b>			
Course Credit	(1lectue hr+1practical hr)			
Course Information	Target Group 1 <sup>st</sup> year Climate Change and Development students Academic Year I Semester II			
Program coordinator	Name:- _Dong Gill_____ Phone No. ..... E-mail: _____ Office:- _____			
Instructor (s) Name and Contact Information	Name:..... Office : ..... Phone : ..... Email : ..... Office hour: .....			
CRH	2			
Student's Work Load (hours)	Lecture	Practical	Home Study	Total
	16	12		32
Course Description	Drivers of deforestation and forest degradation: Definition deforestation and forest degradation; Proximate and indirect causes deforestation; Challenges in the measurement of deforestation and forest degradation. The multiple benefits of forests : Ecosystem services; Methods for valuing economic benefits of forests in a Climate Change context. The REDD+ approach: 1 The emergence of REDD+ in the UN climate framework; Features of a Global REDD+ Mechanism within the UNFCCC; The Phases of REDD+; governance issues and enabling investments and implications of REDD+. Systems for monitoring, measuring, reporting and verifying (M&MRV) on REDD+ activities: Information on Tropical Forest Ecosystems. National Forest Inventories; MRV systems and performance based incentive mechanisms; Methodological Framework. Social and environmental safeguards: Social and environmental risks and opportunities offered by REDD+ ; REDD+ Safeguards in the UNFCCC. Strategic Options and the cost of REDD+ : Strategic Options;2 Solutions in the Forestry Sector; Solutions in Related Economic Sectors; Cost/benefit analysis of strategic options			
Learning Outcome	<ul style="list-style-type: none"> <li>• Explain forest and drivers of forest change.</li> <li>• Comprehend the challenges in measuring deforestation and forest degradation</li> <li>• Understand the concept of REDD+ approach in climate change context</li> <li>• Apply the concept of monitoring, measuring, reporting and verifying (M&amp;MRV) systems</li> </ul>			
Week	Topic	Lecture	Practical	Reading material
	<b>Chapter 1: The multiple benefits of forests</b> 1.1 Ecosystem services: linking ecosystems and society 1.2 Benefits of forests in a Climate Change context	2		This part has to be filled by Dr Solomon and Gonzalo

	1.3 Methods for valuing economic benefits of forests			
	<b>Chapter 2: Drivers of deforestation and forest degradation</b> 2.1 Definition of deforestation and forest degradation 2.2 Factors Affecting Deforestation and Forest Degradation : 2.2.1. Proximate Causes 2.2.2. Indirect Causes 2.3 Challenges in the measurement of deforestation and forest degradation 2.4 Interactions between drivers of deforestation and forest degradation	2		
	<b>Chapter 3: The REDD+ approach</b> 3.1 The emergence of REDD+ in the UN climate framework 3.2 The Features of a Global REDD+ Mechanism within the UNFCCC 3.3 The Phases of REDD+ : 3.3.1 Readiness: Institutional framework, Activities, National Strategy 3.3.2 Results-based demonstrations activities: Institutional framework, secure funding activities, lessons from demonstration projects. 3.3.3 Incentives for results-based actions: Institutional framework, nature of contracts, site selection criteria, effective implementation of PES (Payment for Ecosystem Services) programs 3.4 Implementation framework,	3		

	governance issues and enabling investments 3.5 Political nature and implications of REDD+ 3.6 Case Studies: 3.6.1. REDD+ international practice and lessons. 3.6.2. Ethiopia's REDD+ Readiness Phase			
	<b>Chapter 4: Systems for monitoring, measuring, reporting and verifying (M&amp;MRV) on REDD+ activities</b> 4.1 Information on Tropical Forest Ecosystems. National Forest Inventories. 4.2 MRV systems and performance based incentive mechanisms. 4.3 Components of MRV systems: Satellite Land Monitoring System, National Forest Inventory, GHGs Inventory. 4.4 Targets: carbon pools (Emission Factors), LULC changes (Activity Data), Forest reference emission levels (FREL) 4.5. Methodological Frameworks 4.6 Community and participatory monitoring of forests. Participatory MRV approach	4	16	
	<b>Chapter 5: Social and environmental safeguards</b> 5.1 Social and environmental risks and opportunities offered by REDD+ 5.2 REDD+ Safeguards in the UNFCCC 5.3 The effectiveness of safeguards	2		

	5.4 Ensuring additional social and environmental benefits from REDD+			
	<b>Chapter 6: Strategic Options and the cost of REDD+</b> 6.1 Strategic Options 6.2 Solutions in the Forestry Sector 6.3 Solutions in Related Economic Sectors 6.4 Cost/benefit analysis of strategic options 6.5 Opportunity costs as the basis for REDD+ Payments 6.5 Prioritization of strategic options 6.6 Identifying the costs of REDD+ 6.7 Estimating the costs of REDD+ 6.8 Components necessary for implementation of REDD+	3		
<b>Practical session</b> Application of MRV in selected projects Humbo or Adaba Dodola				
<b>Assessment/Evaluation</b> Assignments, presentation and final exam				
<b>Attendance requirement:</b> 100 % Lecture, 100% Practical				
<b>Delivery Mode:</b> Lecture, project work (in group or individual basis), presentation,				
<b>References books</b>	. This part has to be filled by Dr Solomon and Gonzalo  UNEP (2014) Forests in a Changing Climate: A Sourcebook for Integrating REDD+ into Academic Programmes, United Nations Environment Programme, Nairobi, Kenya  REDD+ Implementation: A manual for National Legal Practitioners (March 2014)			