Course code	Course title	Responsible lecturer
FONC-625	Climate Change mitigation and adaptation	
Contents and goals of qualification	**Contents**: Abiotic factors with relevance for climate, and the feedbacks of ecosystems, atmosphere and hydrosphere. Climate systems, certain stocks, fluxes of matter and land-use with examples from the tropics. Biophysical and economic impacts of climate change on forests in tropical and sub-tropical countries. Impacts of climate change on socioeconomics of rural communities. Role and mechanism of forests for climate change mitigation and adaptation. Vulnerability and resilience of natural systems, Ecosystem services of forests. Payment for environmental services and carbon projects. Global climate change negotiations. Local perspectives of climate change based on case analysis, estimation of aboveground and belowground carbon stocks in forests and protected areas, impacts of climate change, impacts of climate change on forests and protected areas, contribution of forests and protected areas to climate change adaptation and mitigation. **Goals of qualification**: The students will acquire knowledge of climate change impacts as well as adaptation and mitigation strategies from the perspective of forestry.	
Modes of teaching and learning	The course comprises: 2 hr/wk Lecture and 3 hrs/wk practical (field visits, exercise, and independent studies)	

Applicability	Compulsory
Credits and assessment	3 (2+3) Credit hour; Seminar paper (30%), Group project and presentation (20%), Written exam (50%)
Text books	Freer-Smith PH. Broadmeadow MSJ. Lynch JM. (eds) 2007. Forestry and climate change. Columns Design Ltd, Reading, UK Recent peer reviewed journal papers published in the Ethiopian context shall be used for seminars