

220-509 Forests, Carbon and Climate Change

Climate change and forests are intrinsically linked. On the one hand, changes in global climate threaten existing forests through higher mean annual temperatures, altered precipitation patterns and more frequent and extreme weather events. On the other hand, due to the potentially large amount of carbon in long-lived stems and roots forests are the largest terrestrial carbon sink with significant consequences for the mitigation of climate change.

Topics covered

Climate change: The role of CO₂ and other atmospheric trace gases

- Forest ecosystems as sinks and sources of trace gases
- Effects of climate change on forest ecosystems
- Forests and forest plantations in the global carbon cycle
- Carbon sequestration in forests: a mitigation option?
- Carbon accounting schemes and forests and forest plantations
- Carbon accounting tools in hands-on sessions with industry partners

Course Co-ordinators

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2009 Study Dates and Locations

- *Intensive teaching* from June 1-12, 2009 at the Creswick Campus
- *Study materials* available from mid-May via the Learning Management System.



Teaching plan

- This subject will be taught in a combination of lectures, practical exercises, group studies and 2-3 hours per day of private study.
- Students will work in small groups on experimental topics and will provide an oral presentation including a defence-style exam at the end of the course. A 3000 word assignment is due at the end of July.
- In the first week we will discuss the facts and fiction of climate change and evaluate what impact climate change will have on forest ecosystems. The second week will focus on the role that forests play in carbon accounting and to what degree forests can be used as an carbon offset scheme. We will invite industry and government experts on carbon accounting and get hands on experience in carbon trading.

Enrolment Options

- This subject is normally offered through the Master of Forest Ecosystem Science but is available to students from other courses subject to their Course Coordinator's approval.
- The subject may also be taken as an individual subject through the University's Community Access Program (CAP). This may be in assessed or non-assessed mode. For further information see: <http://www.unimelb.edu.au/community/access/>

Student costs, travel and accommodation

- Estimated accommodation costs for 8 nights in Creswick (\$180)

Further Information

Information will be updated at:
<http://www.forests.unimelb.edu.au>

