



ForBio course: Diversification in Time & Space

The course is given as a remote (internet) course in the period 27 October – 5 December 2014:
<http://kurs.vm.ntnu.no/>

Recommended course credits: 10 ECTS

Level: PhD-level course

Language of instruction: English

Admission deadline: 26.10.2014: Apply by sending email with name and affiliation to
heidi.solstad@ntnu.no

Prerequisites: Advanced courses in genetics and/or phylogenetic biology is an advantage.

Course materials:

R Nielsen & M Slatkin "An Introduction to Population Genetics" (2013), Sinauer

Various texts on molecular dating, biogeography and multispecies coalescent provided online.

Course content:

This course deals with how patterns of biological diversity changes over time and processes causing these changes. Focus will be on understanding micro- and macro-evolutionary processes, how these change species diversity and species distributions, and how to obtain knowledge of species histories. Emphasis will be placed on understanding methods used in analyses of micro- and macro-evolutionary diversification in time and space, and in particular coalescent theory as tool for understanding population genetic processes and inferring phylogenetic patterns.

Teaching program:

Teaching will be in the form of online lectures, online discussions and exercises.

Learning outcomes:

The course will give an overview of theory and tools to be used in studies of species histories and historical biogeography.

Final evaluation: A one-day online exam will be held by the end of the course. Grade: pass/fail.
ForBio certificate will be provided if passed.

Teachers:

Hans K. Stenøien, NTNU, course leader stenoien@ntnu.no

Stephan Nylander, Swedish Museum of Natural History

Bengt Oxelman, University of Gothenburg

ForBio contact person:

Heidi Solstad heidi.solstad@ntnu.no