



GÖTEBORGS UNIVERSITET

RevBayes and BEAST2, 1.5 hp

Course period: October 23-27, 2017	Last day for application: September 30, 2017
Course leaders / Address for applications: Walker Pett / willpett@iastate.edu Bengt Oxelman / bengt.oxelman@bioenv.gu.se	
Course description (Advertisement for Ph.D. students): RevBayes and BEAST2 are two major software packages implementing Bayesian phylogenetic methods. In this course, RevBayes will in particular be used to jointly infer fossil and molecular data, whereas the STACEY and DENIM add-ons to BEAST2 will be used to infer species delimitation and migration under the the multi-species coalescent model. The theoretical background to these particular methods will be covered, as well as practical usage of them in RevBayes and BEAST2, respectively. Participants are encouraged to think of potential applications of these methods in their research.	

Responsible department and other participation departments/organisations: Department of Biology and Environmental Science
Teachers: Walker Pett Bengt Oxelman
Examiner: Bengt Oxelman



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Faculty of Science; Department of Biological and Environmental Sciences

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Third cycle education

1. Confirmation

Disciplinary domain: Science

Department in charge: Department of Biological and Environmental Sciences

2. Position in the educational system

Elective course; third-cycle education.

3. Entry requirements

Admitted to third cycle education.

4. Course content

The course includes: 1) frontal lectures on RevBayes and BEAST2, and 2) practical computer work using fossilized birth/death models, STACEY and DENIM in these packages

5. Outcomes

After completion of the course the participants will have gained a better understanding of RevBayes and BEAST2, in particular the fossilized birth/death models, STACEY and DENIM

6. Required skills

Basic knowledge of Bayesian statistics and phylogenetics

7. Assessment

The final grade will be based on course participation and interaction in discussion, as well as the executing data in RevBayes and BEAST2.

8. Grading scale

The grading scale comprises Fail, (U), Pass (G)



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9. Course Evaluation

The course evaluation is carried out together with the Ph.D. students at the end of the course, and is followed by an individual, anonymous survey. The results and possible changes in the course will be shared with the students who participated in the evaluation and to those who are beginning the course.

10. Language of instruction

The language of instruction is English.