

PhD course in Evolutionary Processes 2012

Biology Dept., Lund University

Head Teacher: Jörgen Ripa (jorgen.ripa@biol.lu.se)

Other: Per Lundberg

Literature: Handouts

Credits: 2 ECTS

Examination: Home assignment at the end of the course

Location: Argumentet seminar room, 2nd floor, Ecology Building

Mon 15 Oct	9-10	Introduction and student presentations
	10-12	Mutation, Selection, Fixation and Drift (L) JR The mechanics of evolution
	13-16	<i>Exercises (Math, Computer)</i>
Tue 16 Oct	9-12	Adaptation (L) JR Adaptive landscapes, frequency and density dependence, adaptive dynamics
	13-16	<i>Computer Exercises</i>
Wed 17 Oct	10-12	The Mapping of Genes to Fitness (L) PL Evolutionary constraints, morphospaces, canalization and plasticity, G-functions
	pm	<i>Home assignment</i>
Thu 18 Oct	9-10	Evolutionary Branching (L) JR
	10-11	<i>Computer exercise, Evolutionary Branching</i>
	11-12	The Evolution of Reproductive Isolation (L) JR Genetic incompatibilities, magic traits, sexual selection
	13-14	<i>Computer exercise, Speciation</i>
Fri 19 Oct	9-11	Community and Macro-evolution (L) JR Adaptive radiations, niche conservatism, α - and β -niches, stasis, mass extinctions, punctuated equilibria
	14-16	<i>Report home assignment</i>