SLU

BI-1425 Evolution & Ecology for Animal Science Students (and other amazing people) 7,5 credits

Jan 2025 - May 2025 Schedule updated 1 December 2024

Course Leader: Matt Low matt.low@slu.se

How are you expected to interact with this course?

This course is designed for you to interact with the material at a time that suits you best, and that you can do in parallel with other courses or work. I realise you are all busy people with lots of things to do and learn. So my emphasis is to give you an understanding of some key concepts and ideas central to evolution and ecology to get you to start thinking and seeing the world in new ways.

To do this, once per week across 12 weeks we will have a live 2-2.5 hour lesson **on zoom** with some in-class discussions (**mostly on a Wednesday afternoon** between 13-15:30, *but occasionally on a Tuesday or Thursday depending on the timing of holidays etc*). This lecture will be simultaneously recorded and uploaded, so if you miss the 'live' lecture you can watch the recording afterwards (or rewatch it if you would like to see something again). The course will be divided into 3 modules (4 weeks each with a couple of weeks break between modules) and you will have to complete a short written reflection assignment at the end of each module. These assignments are to get you to start thinking about how to apply new ideas into your current studies or work (as a reflection), rather than 'testing' you to see what you know. My philosophy is that this course is to help you in your future work, and that you will get out of it what you put in. So engage and enjoy and see if it takes your thinking somewhere new :). See you in class and in canvas!

For each subject lesson for the 12 weeks there will be a canvas page with a summary of what the lesson is about, the recorded lesson, a pdf copy of the slides for the lesson, plus some reflection questions and additional material you can engage with (either before or after the lesson). This means you can 'deep dive' into the subjects that interest you, at a time that best suits you (but don't leave it too ling so that you forget all about it!)

for details of what lessons we'll cover and when see the schedule below and the canvas course room when you are invited to join

Date	Time	Lecture
Monday 20 January	13:00 - 14:00	Course Introduction
Module 1: Selection		
Wednesday 22 January	13:00 - 15:30	Natural Selection
Thursday 30 January	13:00 - 15:30	Sexual Selection
Wednesday 5 February	13:00 - 15:30	Artificial Selection & Domestication
Wednesday 12 February	13:00 - 15:30	Cultural Selection & Meme Theory
February 28	Assignment 1 due	
Module 2: Ecology		
Tuesday 4 March	13:00 - 15:30	Genetics (the fun bits)
Wednesday 12 March	13:00 - 15:30	Behavioural Ecology
<u>Tuesday</u> 18 March	13:00 - 15:30	Comparative Morphology
Wednesday 26 March	13:00 - 15:30	Ecology (some basic concepts)
April 16	Assignment 2 due	
Module 3: Medicine & Health		
Wednesday 23 April	13:00 - 15:30	Evolutionary Medicine
<u>Tuesday</u> 29 April	13:00 - 15:30	One Health & Ecohealth
Wednesday 7 May	13:00 - 15:30	Invasive Domestic Species
Wednesday 14 May	13:00 - 15:30	Animal Welfare (an evolutionary perspective)
May 30	Assignment 3 due	