Lesson plan

Course: Darwinian Evolution
Degree programme: Competent human
Learning objective of this lesson: To realise

Instructor: Pesho
Date: today, 2020

Time	Phase	Activity	Group composition	Material	Notes
1	**Lead-in**	Introduce Darwinian evolution formally: **agents** with variation, selection, inheritence Give an example for non-bio evol.	All together	Magnetic board Black board marker	1) randomness 2) by fitness function 3) individual agent characteristics
2	**CAT** Assessment of prior knowledge*	Ask to check the 3 properties for several examples: biological evolution (what if no mutation, or no penalty for a disease), fire.	All together	As above	Fill a table with 4 cols: agent, variation, fitnness fn, inheritance
5	**Participatory learning activity (PLA)**	What agents and properties. Immune cells, Computer viruses, Thoughts, Religions, Social structures.	5 groups, each working separately on a different example	Small labeled papers with 4 different colors (agents and 3 properties) Paper markers	Draw 5x4 table and instruct each group to fill 4 colors sheets for their case
5	**CAT** Formative assessment of learning in PLA*	The table on the board is filled with the colored papers. The organizer goes through the table and asks for objections from any group.	All together	Magnets	The organizer places all papers in the table on the board
0.5	**Summary**	Darwinean Evolution may happen in different places. Its implications are immense. You may want to rethink you understanding.	All together	HW: Is it thinkable that the black holes may evolve darwinianly?	Darwinian Evolution is simply an optimization strategy

* Please put these phases into practice in the microteaching /practice peer observation task. Select either a CAT to assess prior knowledge or a CAT to assess learning.

Adapted from: „Instructional Skills Workshop“, EPFL Lausanne, May 2015