## **Tentative course schedule Evolutionary Computing 2023/24 (v4)**

- 1. Chapters are from the course book: Eiben and Smith, Introduction to Evolutionary Computing, 2<sup>nd</sup> ed., Springer, 2015
- 2. For each chapter, Canvas offers additional material: a presentation and a video lecture recorded during the pandemic.

Nr	Date, day, time	Agenda
1	Sept 5 Tuesday 09:00-10:45	General course info, Presentation about the standard programming assignment and the research assignment Lecture on evolutionary problem solving (not in book, slides and video lecture on Canvas)
2	Sept 7 Thursday 13:30-15:15	Introduction to EvoMan (Karine) Problems to be solved (ch01), EC the origins (ch02),
	Sept 7 Thursday 17:30-19:15	Practical session about the programming assignment FINALIZING STUDENT TEAMS FOR THE PROGRAMMING ASSIGNMENT
3	Sept 12 Tuesday 09:00-10:45	What is an EA (ch03), Representation, Mutation, and Recombination (ch04),
4	Sept 14 Thursday 13:30-15:15	Representation, Mutation, and Recombination (ch04) continued Interactive tutorial
	Sept 14 Thursday 17:30-19:15	Practical session about the programming assignment
5	Sept 19 Tuesday 09:00-10:45	Fitness, Selection, and Population Management (ch05), Interactive tutorial
6	Sept 21 Thursday 13:30-15:15	Neuro-Evolution (not in book, slides and video lecture on Canvas) Lecturer: Karine
	Sept 21 Thursday 17:30-19:15	Practical session about the programming assignment
7	Sept 26 Tuesday 09:00-10:45	Popular EA variants (ch06), part 1
8	Sept 28 Thursday 13:30-15:15	Popular EA variants (ch06), part 2. Parameter Tuning (ch07) Lecturer: Karine
	Sept 28 Thursday 17:30-19:15	Practical session about the programming assignment
	Oct 1 Sunday 23:59	Deadline for Assignment 1 report
9	Oct 3 Tuesday 09:00-10:45	Parameter Control (ch08), Working with EAs (ch09)
10	Oct 5 Thursday 13:30-15:15	Interactive tutorial Review and discussion of selected papers (shared on Canvas)
	Oct 5 Thursday 17:30-19:15	Practical session about the programming assignment

11	Oct 10 Tuesday 09:00-10:45	Hybridisation with other techniques / Memetic Algorithms (ch10), Multiobjective Evolutionary Algorithms (ch12), Constraint Handling (ch13)
12	Oct 12 Thursday 13:30-15:15	Extra Q&A session w.r.t assignment / competition Lecturers: Banno and Bob
	Oct 12 Thursday 17:30-19:15	Practical session about the programming assignment
	Oct 15 Sunday 23:59	Deadline for the competition submission (Assignment 2)
13	Oct 17 Tuesday 09:00-10:45	Evolutionary Robotics (ch17)
14	Oct 19 Thursday 13:30-15:15	Competition results and prizes, exam info, Q & A, subjects for possible Master project announced.  Guszti's "TED talk" on The Evolution of Things
	Oct 20 Friday 23:59	Deadline for Assignment 2 report
	Oct 23 Monday 18:45-21:30	EXAM on Campus (multiple choice)