## **Tentative** course schedule Evolutionary Computing 2023/24 (v5)

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

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)