MATH 497 Introduction to Dynamical Systems Spring 2024 Schedule

Lec.	Date	Topic
1	1/8	An overview: questions and examples.
2	1/10	Contractions in $\mathbb{R}$.
3	1/12	Contractions in metric spaces. Fibonacci numbers.
	1/15	*Martin Luther King Day - no classes.*
4	1/17	Increasing maps of an interval.
5	1/19	Perturbations. Attracting fixed points. Newton's method.
6	1/21	Periodic points. Circle rotations.
7	1/23	Density and equidistribution of orbits for irrational circle rotations.
8	1/25	First digits of powers.
9	1/29	Times-3 map of the circle.
10	1/31	Numbers in base 3. More on times-3 map. The Cantor set.
11	2/2	Comparing dynamical systems. Structural stability.
12	2/5	Sequence spaces: definitions, distances, and convergence.
13	2/7	Shifts on sequence spaces.
14	2/9	
15	2/12	
16	2/14	
17	2/16	
18	2/19	
19	2/21	
20	2/23	
21	2/26	
22	2/28	
23	3/1	
	3/3-9	*Spring break – no classes*
24	3/11	
25	3/13	
26	3/15	
27	3/18	
28	3/20	
29	3/22	
30	3/25	
31	3/27	
32	3/29	
33	4/1	
34	4/3	
35	4/5	
36	4/8	
37	4/10	
38	4/12	
39	4/15	
40	4/17	
41	4/19	
42	4/22	
43	4/24	
44	4/27	