

סדר הרצאות ותרגילי בית, חורף תשפ"ד

Planned schedule for the course – Winter 2023-2024

(** Dates and content are tentative and may be subject to changes)

No.	Date	Topic	Homework & comments
1	16/1/2024	Introduction, Lagrange's equations of dynamics	HW#1 released
2	23/1/2024	Lagrange's equations continued, numeric integration Systems with kinematically-actuated DOFs	
3	30/1/2024	Constrained Lagrange's equations – holonomic constraints	
4	6/2/2024	Constrained Lagrange's equations – nonholonomic constraints	HW#2 released
5	13/2/2024	Nonholonomic constraints continued. Contact kinematics	HW #1 submission (4 weeks)
6	20/2/2024	Contact forces and friction. Analyzing 2D contact problems	
	27/2/2024	No classes - Municipal elections day – אין לימודים – בחירות לרשויות מקומיות	
7	5/3/2024	Analyzing 2D contact problems - continued	HW #2 submission (1+3 weeks) HW #3 released
8	12/3/2024	Contact dynamics – unilateral, frictionless & no-slip contacts	
9	19/3/2024	Contact dynamics – finite friction, slippage, Painlevé paradox, stick-slip transitions	
10	26/3/2024	Frictionless impact – point particle, Lagrange formulation for mechanical system, energy balance	HW #3 submission (3 weeks) HW #4 released Midterm exam A – 28/3/2024
11	2/4/2024	Hybrid mechanical systems, Zeno phenomenon, Impact with friction for point particle.	
12	*8/4/2024 *Tuesday's schedule	Impact with friction - Lagrange formulation, energy balance Impact laws of Chatterjee and Routh	HW #4 submission (3 weeks) Final project released
		Midterm exam B – 30/4/2024 Final project submission deadline - 27/5/2024 (7.5 weeks)	