

Week	Date	Broad topic	Lecture title	Exercise Set	Lecture	Exercises
1	10-Sep	Basic principles of NPP / LWR	L00: Introduction /L01: Review of nuclear physics	--	A. Pautz	--
	11-Sep		L02: Interaction of neutrons with matter	--	M. Hursin	--
2	17-Sep		L03: Nuclear fission	E01_nuclear_physics	M. Hursin	M. Van Rossem
	18-Sep		L04: Fundamentals of nuclear reactors	E02_interactions_neutrons_matter	A. Pautz	M. Krstovic
3	24-Sep		L5: LWR plants	E03_nuclear_fission	M. Hursin	M. Krstovic
	25-Sep			E04_fundamentals_NPP	M. Hursin	M. Van Rossem
4	01-Oct	Modeling the beast	L06: The diffusion of neutrons - Part 1	E05_LWRplants	M. Hursin	M. Van Rossem
	02-Oct		L07: The diffusion of neutrons - Part 2	E06_diffusion_I	A. Pautz	M. Krstovic
5	08-Oct		Applied problem (1)		M. Hursin	--
	09-Oct		L08: Neutron moderation without absorption	E07_diffusion_II	A. Pautz	M. Krstovic
6	15-Oct		L09: Neutron moderation with absorption	E08_neutron_moderation	M. Hursin	M. Van Rossem
	16-Oct		L10: Multigroup theory	E09_moderation_w_absorption	A. Pautz	M. Van Rossem
7	29-Oct		L11: Element of lattice physics	E16_Extra_Fixedsource	M. Hursin	M. Van Rossem
	30-Oct		Applied problem (2)		M. Hursin	--
8	05-Nov		L12: Neutron kinetics	E17_Extra_Onegroup	M. Hursin	M. Van Rossem
	06-Nov		L12: Neutron kinetics	E10_multigroup	A. Pautz	M. Krstovic
9	12-Nov		Applied problem (3)		M. Hursin	--
	13-Nov		L13: Depletion	E11_lattice	M. Hursin	M. Krstovic
10	19-Nov	Reactor Concepts Zoo	L14: Advanced LWR technology	-- (Nagra/Axpo visit)	A. Pautz	--
	20-Nov		Applied problem (4)		M. Hursin	--
11	26-Nov		L15: Breeding and LFR	E12_kinetics_I	A. Pautz	M. Van Rossem
	27-Nov		L15: Breeding and LFR	E13_kinetics_II	A. Pautz	M. Krstovic
12	03-Dec		Applied problem (5)		M. Hursin	--
	04-Dec		L16: AGR, HTGR	E14_depletion	A. Pautz	M. Krstovic

13	10-Dec		Applied problem (6)		M. Hursin	--
	11-Dec		L17: Channels, MSR and thorium fuel	E15_Tokaimura	A. Pautz	M. Krstovic
14	17-Dec		L17: Channels, MSR and thorium fuel	E18_Extra_Reactivity	A. Pautz	M. Van Rossem
	18-Dec		Review session		M. Hursin	--