

## Syllabus Biophysics course 2019

week 01 18.02.2019	SM	Introduction Numbers in biology		Ex. 01: estimates
week 02 25.02.2019	SM	Membranes I Hydrophobic effect, self-assembly	Ex. 01	Read 01: abstracts
week 03 04.03.2019	TR	Scientific Reading Publications and article reading		Read 02: Baumgart <i>et al.</i>
week 04 11.03.2019	SM	Membranes II Entropy, membrane shape	Read 02	Ex. 02: hydrophobic
week 05 18.03.2019	SM	Membranes III Transport, ion channels	Ex. 02	Read 03: Studer <i>et al.</i>
week 06 25.03.2019	SM	Membranes IV, Stat. Mech. I Ligand binding	Read 03	Ex. 03: membrane shape & ligand binding
week 07 01.04.2019	SM	Proteins I Ligand binding, crowding, entropic forces	Ex. 03	Read 04: Yildiz <i>et al.</i>
week 08 08.04.2019	AP	Bacterial biophysics	Read 04	Read 05: Zandi <i>et al.</i>
week 09 15.04.2019	CS	Proteins II Diffusion	Read 05	Ex. 04: Crowding
week xx 22.04.2019	Easter Break			
week 10 29.04.2019	SM	Proteins III: Transport & directed motion	Ex. 04	Optional article, read PBOC
week 11 06.05.2019	SM	Genomes I: DNA	Discuss PBOC	Read 05: Tabor <i>et al.</i> Synth edge dete.
week 12 13.05.2019	SR	Statistical Physics in Biology	Erik	Read 06: Marenduzzo <i>et al.</i>
week 13 20.05.2019	SM	Genomes II (U. Alon - systems biology): Basic transcription	Read 06	Ex. 05: [old ex 6&7] DNA twist & Signalling Cascade
week 14 27.05.2019	SM	Genomes III (U. Alon - systems biology): Autoregulation	Ex. 05	
4:15 pm 18.06.2019	Written Exam			