Timetable and topics for lectures

Date	Topic
09.01.2019	Introduction to course **Part I: An overview of production systems and engineering tools:** • Some general remarks • Bacteria (*E. coli* and alternatives) • Lower eukaryotes (yeasts, fungi) • Higher eukaryotes (plants, mammals, insect cells)
10.01.2019	
15.01.2019	
17.01.2019	
22.01.2019	**Part II: Expression of recombinant proteins: limitations and engineering strategies** • Engineering of cellular processes for improving productivity • Protein N-glycosylation, protein folding, secretion, cell-cycle and apoptosis in eukaryotes and bacteria
24.01.2019	
29.01.2019	
31.01.2019	
05.02.2019	**Part III: Metabolic engineering:** • Production of small molecules • secondary metabolites
07.02.2019	
12.02.2019	
14.02.2019	Student presentation: **Biotechnologically produced products**