

Syllabus

Phys-302 Physics of Biological Systems

Prof. Sahand Rahi

Syllabus

Week	Topic
1	Population genetics 1
2	Population genetics 2
3	Population genetics 3
4	Population genetics 4
5	Sequence alignments, extreme value distributions
6	Random graphs
7	Hopfield networks
8	Synchronization
9	Turing patterning
10	Microtubule growth, dynamic instability
11	Chemical kinetics modeling
12	Kinetic proofreading
13	Final project presentations
14	Final project presentations

Homework

4 graded homework sets

Final project topics

- Present any paper from <https://www.epfl.ch/labs/lpbs/teaching/>
- Create protein-antibody fusions that assemble into interesting structures