Bioinformatics
2023-2024

Part I : Foundations

Date	Time	Lecturer	Title
Friday, Oct 20th	1730-1930	Nicholas M. Glykos	A bird's-eye view of bioinformatics: databases, algorithms and programs.
Saturday, Oct 21st	1730-1930	Nicholas M. Glykos	Sequence alignments : bioinformatics' sine qua non. Part I : Scoring matrices, rigorous pairwise sequence alignment algorithms, multiple sequence alignment methods
Sunday, Oct 22nd	1730-1930	Nicholas M. Glykos	Sequence alignments : bioinformatics' sine qua non. Part II : BLAST and friends, database searches
Saturday, Nov 11th	1500-1700	Aristotelis C. Papageorgiou	Phylogenetic analysis and clustering : a very short introduction
Sunday, Nov 12th	1200-1400	Nicholas M. Glykos	Machine learning : introduction to hidden Markov models & artificial neural networks

Part II : Methods, algorithms, databases and applications

Date	Time	Lecturer	Title
Saturday, Nov 25th	1200-1400	Petros Kolovos	Bioinformatics and state-of-the-art scientific approaches
Sunday, Nov 26th	1730-1930	Katerina Chlichlia	Application of bioinformatics to predict MHC ligands and antigenic T-cell epitopes.
Saturday, Dec 9th	1500-1700	Grigoris Amoutzias	Bioinformatics applications to proteomics and phosphoproteomics.
Sunday, Dec 10th	1200-1400	Georgios Ch. Sirakoulis	Cellular automata models in Biology
Saturday, Jan 13th	1730-1930	Antonis Giannakakis	The evolution of gene expression
Sunday, Jan 14th	1730-1930	Nicholas M. Glykos	Protein folding problem : physics-based atomic resolution approaches.