

Department: Mathematics and Computer Sciences

Division: Computer Sciences

Level and Major: Graduate

Course Title: Special Topics in Artificial Intelligence

Number of Credits: 3

Prerequisite: Permission Group

Lecturer:

Course Description:

Course Goals and Objectives:

Course Topics:

- Hidden Markov Model and its Application in Bioinformatics (e.g. sequence and profile alignment) Deep Learning and their Application in Bioinformatics (e.g. secondary structure prediction, fold prediction, contact prediction)
- Support Vector Machine and its Application in Bioinformatics (e.g. protein fold recognition, mutation prediction)
- Bayesian Networks and their Applications in bioinformatics (e.g. gene regulatory network)

Reading Resources:

Evaluation: