Data Mining 2020

Martti Juhola
Lectures and exercises

Martti Juhola:
- advanced study course 5 ECTS
- 12 lectures (24 h): on Tuesdays at 10-12, on the 14th January Pinni B1097, the 21st January Pinni B1097 and from the 28th January to the 18th February, Main Building A3; on Wednesdays at 10-12 from the 15th January to the 29th January Main Building A3, on the 5th February Pinni B3116, and on the 12th February and the 19th February Main Building A3

Jyrki Rasku:
- 5 weekly exercises (10 h): on Thursdays at 8-10 from the 23rd January to the 20th February at 8-10 Main Building D11
To pass the course:

(1) at least 30% of weekly exercises made; if made more, additional scores can be obtained when one makes more of all weekly exercises than 30%, additional scores [0,5] are given as follows: ≥30 %, 0; ≥41 %, 1; ≥52 %, 2; ≥63 %, 3; ≥74 %, 4; ≥85 %, 5 scores (at least 30% of all weekly exercises have to completed)

(2) the examination is passed, when scores are obtained from [12,30]; exercise scores are added to the examination scores.

Examinations on the 4th March, 18th March and 1st April, 2020.
**Literature mainly:**

Dorian Pyle: *Data Preparation for Data Mining*, Morgan Kaufmann (Elsevier), 1999


Margaret H. Dunham: *Data Mining, Introductory and Advanced Topics*, Pearson Education Inc., 2003


Some journal articles.
Notes

The content of the current course considers mostly preparation or preprocessing of data for mining for two reasons. Preprocessing is in a significant role to obtain as good results as possible in data mining. Machine learning algorithms needed for explorative data analysis, prediction, classification and clustering have a minor role in this course, because they will be the content of course *Machine Learning Algorithms* (period IV, 2020) and that of *Neurocomputing* (probably fall term 2021).

Since this is the third presentation of the current course, slight inaccuracy may still appear.

The home page of Data Mining course: [https://coursepages.uta.fi/tiets11/](https://coursepages.uta.fi/tiets11/)