AMS4640
Machine Learning

Department of Mathematics, Statistics and Insurance
The Hang Seng University of Hong Kong

Lecturer: Dr. Benson Lam

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Lectures and Rules:

1) 1 lecture (with 180 mins each) per week but note that each lecture lasts only 150-160 mins.
2) Medium of instruction: English.
3) Punctuality
   (a) > 15 minutes late will be counted as ABSENT*.
   (b) All lectures must start on time.
4) Don't print lecture notes in class.

*Students should note that an absence means non-attendance at the scheduled session, providing a medical certificate and taking sick-leave will still be counted as an absence.

Lectures and Rules:

5) **Minimum Attendance = 80%*.**
Students with an attendance record < 80% would fail the module.

6) **Attendance Record: Students should note that it is their responsibility to keep track of their attendance. They are required to contact the module lecturer immediately for any discrepancy in their attendance records.**

Office Hours (Dr. Benson Lam):

Thursday: 0900 to 1200
Friday: 0900 to 1200

1. Please come to see me in these periods of time if you have any problems.
2. We may not answer any questions at any other time slots.
3. You may not be able to contact me unless you make appointment in advance.
4. Do NOT ask questions about exercises through emails.

Assessment

- **Participation (5%)**
- **Assignments (30%)**
- **Test (15%)**
  - **Tentatively 10th, Apr, 2024(Thu).**
  - **Time: 15:00 to 16:00**
  - **Duration: 1 hour.**
  - **No re-test will be given in any circumstances.**
- **Project (50%)**
  - **To be announced later**

Very important:

The main focuses of this module are on logic, theory, concept and applications of mathematics and statistics.

The style and format of assignments, tests, and exam would be varied from time to time.

In other words, you may encounter different kinds of questions in the assignments, tests, and exam.

Teaching Materials

- **All course materials (notes, assignments & supplementary exercises and numerical answers) can be downloaded from ecampus:**
  - **https://ecampus.hsu.edu.hk/moodle/login/index/**

- **Notes will not be provided in-class. You must download the notes (and other materials such as assignments) from ecampus and then print it yourself.**

Teaching Materials

- **Textbooks/References:**
- 1. Witten, I.H., Frank, E., Hall, M. A. and Pal, C.J. (2016) Data Mining: Practical Machine Learning Tools and Techniques (Morgan Kaufmann Series in Data Management Systems) (4th edition), Morgan Kaufmann.*
- 2. Goodfellow, I., Bengio, Y. and Courville, A. (2016). Deep Learning (Adaptive Computation and Machine Learning series), The MIT Press.
- 3. Lantz, B. (2015). Machine Learning with R (2nd edition), Packt Publishing.

Module Contents

- Chapter 1. Introduction to Machine Learning
- Chapter 2: Unsupervised Learning
- Chapter 3: Supervised Learning