

Syllabus for Methods in Applied Mathematics I, 2008

Akihito Hora (Graduate School of Mathematics)

1. *Plan of the Course*

Four lectures are scheduled as follows.

1. Probability space, random variable, and conditional probability
2. Markov chain and examples
3. Analysis of transition matrix
4. Long time behavior, Quiz

2. *Aim of the Course*

- Getting familiar with probability models
- Practicing mathematics in English

3. *Method of Evaluation*

You are expected to make reports on (at least) 2 problems chosen from those given in the lectures. You have a small quiz also in the last lecture (30 min). The final grade will be decided by unifying the evaluations of three instructors.

4. *References*

See the course design (monographs by Taylor–Karlin and Ross).

5. *Office Hours*

12h–13h on every Friday at A441 (Hora's office).