OUTLINE

- 課綱 What's in this course?
- 時程 Weekly schedule
- 評分 What is the grading policy?
- 網頁 Website for this course
- 課本 Textbook
- 幫助 Where to find help?

SYLLABUS

Fundamentals

- random experiment, sample space, probability model
- discrete random variables
- continuous random variables

Advanced

- further topics on random variables
- Bernoulli processes and Poisson processes
- Markov processes

TIMELINE

W01 Introduction

W02

Fundamentals

W08

W09 Midterm

W10

Advanced

W014

W15 Final exam

W16 Final session

GRADING

- 課堂 participation
- 小考 quiz
- 期中 midterm
- 期末 final

SPECIAL NOTES

- No make-up for absence from exams. With proper reasons for absence, the score is class average weighted by absentee's standing. It is to your benefit to take exams.
- Sessions cancelled due to flexible holidays will be held in the corresponding special working days.
- This course will be instructed in English if it is jointly offered as an EMI course.

WWW

- who's who
- books
- announcements
- slides
- exams

Техтвоок

Bertsekas and Tsitsiklis, Introduction to Probability

- 得 Get it (purchase or download)
- 讀 Read it
- 用 Work it
- 讚 Like it
- 存 Keep it

ASK

群組 LINE

助教 TAs

課輔 tutor

同學 classmates

學長 juniors and seniors

線上 online tutorials/videos (Google MIT probability)

EXAMPLES IN DAILY LIFE

- 橋 (**Bridge**) What is the probability that trump King is offside with 11-card trump suit? 10-card trump suit?
- 旅 (**Busan**) Socks are drawn one by one from a backpack containing 5 different pairs of socks.
 - What is the expected number of socks drawn until the first drawn sock is matched?
 - What is the expected number of socks drawn until any drawn sock is matched?
- \Re (Bets) What is the probability of large margin (say \geq 3) for a soccer game?
 - every additional goal is won by either side equally likely
 - other assumptions
 - no assumption