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# Math 2421: Probability

## Spring 2022

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### Instructor:

Name: Ke Wang

Office & Phone: Room 3434 & 3469-2016

Email: [kewang@ust.hk](mailto:kewang@ust.hk)

### Meeting time and Venue:

Lectures: Mo 4:30pm-5:50pm, Fr 12pm-1:20pm

Venue: LTE

### Delivery mode:

Online mode for the first two weeks and we will see later.

### Tutorials:

Section	TA/Email	Time	Venue
T1A	CAO Yang/ycaoau	Wed 09:30 - 10:20	1511
T1B	ZENG Wenqi/wzengad	Fri 13:30 - 14:20	2463
T1C	ZHAO Jia/jzhaoaz	Wed 10:30 - 11:20	4504
T1D	WANG Gefei/gwangas	Mon 14:00 - 14:50	LSK1027

### Course Description:

The course covers the basic principles of probability theory. Topics include combinatorial analysis used in computing probabilities, the axioms of probability, conditional probability and independence of events, discrete and continuous random variables; joint, marginal, and conditional densities, moment generating function; binomial, Poisson, gamma, exponential, Gamma, Beta, Cauchy, univariate, and bivariate normal distributions; laws of large numbers; central limit theorem.

### Student Learning Resources

- Students should be focused on the lecture slides (uploaded to Canvas).
  - A textbook (pdf file) can also be found on Canvas. Some of its materials are harder than the lecture slides.
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## Assessment scheme:

- Examination duration: Midterm exam 80mins; final exam 2hrs.
- The midterm examination is scheduled on **March 25 (Friday, 12pm-1:20pm)**.
- Homework sets will be delivered and submitted online via Canvas.
- Percentage of coursework, examination, etc.:

Homework assignments (5 in total)	15 points (3 points for each assignment)
Mid-term exam	35 points
Final exam	50 points
<b>Total</b>	<b>100 points</b>