CLASS SESSIONS [TIME ZONE: EST]

Monday 10:00am-11:20am P&S Amp 1
Wednesday 10:00am-11:20am P&S Amp 1

INSTRUCTOR

Xiaoyu (Jason) Che, PhD
(212)305-8178, xc2273@cumc.columbia.edu
MSPH 1706; Office hours by appointment

TEACHING ASSISTANT(S) [OFFICE HOURS; TIME ZONE: EST; LOCATION]

Fowler, Charlotte	crf2147@cumc.columbia.edu		
Damaraju, Nikhita	nd2674@cumc.columbia.edu	Monday 11:30am- 12:30am	Online
https://columbiacuimc.zoom.us/j/96770140283?pwd=OFo0OUtJUlpZY3J2SVY0eUJxaTlOQT09			
Ge, Liner	lg3156@cumc.columbia.edu	Tuesday 12:00pm- 1:00pm	Online
https://columbiacuimc.zoom.us/j/93794153759			
Mo, Chen	cm4047@cumc.columbia.edu	Friday 10:00am- 11:00am	ARB 657
Shi, Liucheng	ls3751@cumc.columbia.edu	Thursday 11:30pm- 12:30pm	ARB 627
Tumasian, Robert	rat2134@cumc.columbia.edu	Tuesday 3:00pm- 4:00pm	ARB 627
Yi, Haoyang	hy2669@cumc.columbia.edu	Monday 3:00pm- 4:00pm	ARB 657

COURSE DESCRIPTION

This course covers the basic concepts and principles of probability theory that are essential to statistics and biostatistics. Topics covered include: sample space, events, basic set theory, conditional probability, Bayes rule, discrete and continuous random variables, distribution functions, multivariate random variables and distributions, variable transformations, marginal and joint distributions, expectation and variance, moments, moment generating functions, law of large numbers, central limit theorems etc.

PREREQUISITES

Public Health P6104 and working knowledge of calculus.

TEXTBOOKS

- **Mandatory:** *A First Course in Probability*, Sheldon Ross, Prentice Hall
- **Optional:** *Foundations of Modern Probability (Probability and Its Applications)*, Olav Kallenberg, Springer

ASSESSMENT AND GRADING POLICY

Student grades will be based on:
Homework.....30%
In-class Midterm.....30%
In-class Final.....40%

Grading

A+	Reserved for highly exceptional achievement.
A	Excellent. Outstanding achievement.
A-	Excellent work, close to outstanding.
B+	Very good. Solid achievement expected of most graduate students.
B	Good. Acceptable achievement.

B-	Acceptable achievement, but below what is generally expected of graduate students.
C+	Fair achievement, above minimally acceptable level.
C	Fair achievement, but only minimally acceptable.
C-	Very low performance.
F	Failure. Course usually may not be repeated unless it is a required course.

COURSE REQUIREMENTS

There will be weekly homework. Late homework will not be accepted. There will be a midterm exam on October 27th and a final exam on December 20th. There are no make-up exams. You must inform the instructor at least one week prior to the exam with a documented proof if there is a valid reason for missing an exam.

COURSE STRUCTURE

Class sessions will be in lectures. There are no slides to be shown during classes. The lecture notes, homework assignments and solutions will be uploaded to *courseworks* on regular basis. Students are responsible for checking updates on the website.

MAILMAN SCHOOL POLICIES AND EXPECTATIONS

Students and faculty have a shared commitment to the School's mission, values and oath. mailman.columbia.edu/about/mission-history

Academic Integrity

Students are required to adhere to the Mailman School Community Standards and Conduct handbook, which includes the Code of Academic Integrity.

Disability Access

In order to receive disability-related academic accommodations, students must first be registered with the Office of Disability Services (ODS). Students who have or think they may have a disability are invited to contact ODS for a confidential discussion at 212.854.2388 (V) 212.854.2378 (TTY), or by email at disability@columbia.edu. If you have already registered with ODS, please speak to your instructor to ensure that they have been notified of your recommended accommodations by Meredith Ryer (mr4075@cumc.columbia.edu), Assistant Director of Student Support and Mailman's liaison to the Office of Disability Services.