Abstract
Reproducibility and replicability are at heart of science, yet increasing evidence from recent years suggests that many of the findings in psychological science are irreproducible and non-replicable in what some termed as a “replication crisis” and a new movement calling for significant changes in the way we do science. How can we do better? How can we inform colleagues and students about these issues and train students for rigorous replicable reproducible science? In this talk I will discuss a mass-replication effort I headed in HKU courses PSYC2020 and PSYC3052 to conduct 13/11 pre-registered replications of classic findings in judgment and decision-making literature. With the help of four wonderful TAs students analyzed articles and tried to reproduce methods and materials to conduct effect-size calculations and power analyses, design Qualtrics experiments, and adopt latest tools and templates and preregister the replications on the Open Science Framework. We then ran the experiments on (1) a limited sample of HKU students (N = up to 49) and (2) high-power Amazon Mechanical Turk American online samples (power = 0.95-0.99; N = 300-800). PSYC3052 course was overhauled to discuss the replication crisis in-depth and involve students in thinking of its implications and improving. I will briefly present the process, the overarching course designs, the students' mass pre-registered replications findings, as well as my main take-aways from the process. I conclude the experience as an invaluable learning experience, not only for the students, but also for myself and the TA team, with insights and contributions to the literature and the academic community.